Connecting via Winsock to STN

Welcome to STN International! Enter x:x

FILE 'HOME' ENTERED AT 09:47:47 ON 30 DEC 2009

=> file reg

=>

Uploading C:\Program Files\Stnexp\Queries\10585420.str

```
chain nodes :
6  7  8  9  11  20
ring nodes :
1  2  3  4  5  13  14  15  16  17  18
chain bonds :
1-11  2-13  2-20  5-6  6-7  7-8  7-9
ring bonds :
1-2  1-5  2-3  3-4  4-5  13-14  13-18  14-15  15-16  16-17  17-18
exact/norm bonds :
1-5  1-11  2-20  4-5  5-6  7-8  7-9
exact bonds :
```

10/585420

1-2 2-3 2-13 3-4 6-7
normalized bonds:
13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems:
containing 1: 13:

G1:0,N

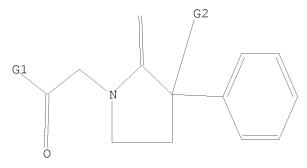
G2:H,O,N,CN,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 11:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 20:CLASS

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR



G1 O,N G2 H,O,N,CN,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sam SAMPLE SEARCH INITIATED 09:48:59 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 999 TO ITERATE

100.0% PROCESSED 999 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

50 ANSWERS

BATCH **COMPLETE**

PROJECTED ITERATIONS: 18084 TO 21876 PROJECTED ANSWERS: 10625 TO 13575

L2 50 SEA SSS SAM L1

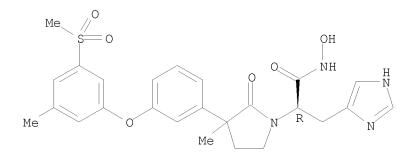
=> d scan

L2 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 1H-Imidazole-5-propanamide, N-hydroxy- α -[3-methyl-3-[3-[3-methyl-5-(methylsulfonyl)phenoxy]phenyl]-2-oxo-1-pyrrolidinyl]-, (α R)-

MF C25 H28 N4 O6 S

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=>

Uploading C:\Program Files\Stnexp\Queries\12585420.str

```
chain nodes :
6 7 8 9 11 20 22 23
ring nodes :
1 2 3 4 5 13 14 15 16 17 18
chain bonds :
1-11 2-13 2-20 5-6 6-7 6-22 6-23 7-8 7-9
ring bonds :
1-2 \quad 1-5 \quad 2-3 \quad 3-4 \quad 4-5 \quad 13-14 \quad 13-18 \quad 14-15 \quad 15-16 \quad 16-17 \quad 17-18
exact/norm bonds :
1-5 1-11 2-20 4-5 5-6 6-22 6-23 7-8 7-9
exact bonds :
1-2 2-3 2-13 3-4 6-7
normalized bonds :
13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 : 13 :
```

G1:0, N

G2:H,O,N,CN,Ak

G3:H,Ak

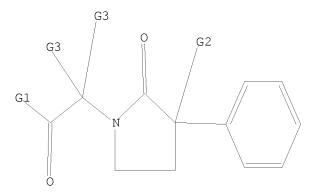
Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS 11:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 20:CLASS 22:CLASS 23:CLASS

L3 STRUCTURE UPLOADED

=> d 13 L3 HAS NO ANSWERS

L3 STR



G1 O, N

G2 H, O, N, CN, Ak

G3 H,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 13 sam

SAMPLE SEARCH INITIATED 09:50:33 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 999 TO ITERATE

100.0% PROCESSED 999 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 18084 TO 21876 PROJECTED ANSWERS: 10625 TO 13575

L4 50 SEA SSS SAM L3

=> d scan

L4 50 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(4-methoxycyclohexyl)-3-(4-methoxyphenyl)-2-oxo-, (α R)-

MF C20 H29 N3 O5

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> s 13 full

FULL SEARCH INITIATED 09:50:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 19891 TO ITERATE

100.0% PROCESSED 19891 ITERATIONS SEARCH TIME: 00.00.05

11832 ANSWERS

L5 11832 SEA SSS FUL L3

=> file ca

=> s 15

L6 83 L5

=> d ibib abs fhitstr 1-83

L6 ANSWER 1 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 151:93250 CA

TITLE: Studies on novel 2-imidazolidinones and

tetrahydropyrimidin-2(1H)-ones as potential TACE

inhibitors: Design, synthesis, molecular modeling, and

preliminary biological evaluation

AUTHOR(S): DasGupta, Shirshendu; Murumkar, Prashant R.; Giridhar,

Rajani; Yadav, Mange Ram

CORPORATE SOURCE: Pharmacy Department, Faculty of Technology and

Engineering, Kalabhavan, The M. S. University of

Baroda, Kalabhavan, Gujarat, 390 001, India

SOURCE: Bioorganic & Medicinal Chemistry (2009), 17(10),

3604-3617

CODEN: BMECEP; ISSN: 0968-0896

10/585420

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 151:93250

AB Compds. belonging to the class of 2-imidazolidinones and tetrahydropyrimidin-2(1H)-ones were synthesized and evaluated for their TACE inhibitory activity. Most of the compds. showed very good TACE inhibitory activity. Docking study clearly indicates importance of the P1' group of the inhibitor for the TACE inhibitory activity. This work proves that these two classes of mols. could be used as potential leads for the development of TACE inhibitors.

IT 478911-60-3, Ik-682

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(imidazolidinones and tetrahydropyrimidinones preparation as potential TACE inhibitors)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:450320 CA

TITLE: Development and Large-Scale Preparation of an Oral

TACE Inhibitor

AUTHOR(S): Savage, Scott A.; Waltermire, Robert E.; Campagna,

Silvio; Bordawekar, Shailendra; Dalla Riva Toma, Joan

CORPORATE SOURCE: Research and Development, Bristol-Myers Squibb

Company, New Brunswick, NJ, 08903, USA

SOURCE: Organic Process Research & Development (2009), 13(3),

510-518

CODEN: OPRDFK; ISSN: 1083-6160

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB An efficient, expedient synthesis of BMS-561392, 1, which enabled rapid delivery of the substance for drug development is described. The key features are efficient synthesis of a phenolic α, α -disubstituted amino ester via carbon alkylation without protection of the phenol, effective enzymic resolution of this racemic amino

ester, and a process for the preparation of the hydroxamic acid drug with undetectable levels of hydroxylamine.

IT 611227-74-8P

RL: IMF (Industrial manufacture); PUR (Purification or recovery); PREP (Preparation)

(process development and scale up synthesis and purification of ${\tt BMS-561392}$ oral TACE inhibitor)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

N O

PAGE 2-A

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:229201 CA

TITLE: Development of predictive 3D-QSAR COMFA and CoMSIA

models for β -aminohydroxamic acid-derived tumor necrosis factor- α converting enzyme inhibitors

AUTHOR(S): Murumkar, Prashant R.; Das Gupta, Shirshendu; Zambre,

Vishal P.; Giridhar, Rajani; Yadav, Mange Ram Pharmacy Department, Faculty of Technology and

Engineering, Kalabhavan, The M. S. University of

Baroda, Vadodara, 390001, India

SOURCE: Chemical Biology & Drug Design (2009), 73(1), 97-107

CODEN: CBDDAL; ISSN: 1747-0277

PUBLISHER: Wiley-Blackwell

DOCUMENT TYPE: Journal LANGUAGE: English

AB A three-dimensional quant. structure-activity relationship study was

CORPORATE SOURCE:

performed on a series of β -aminohydroxamic acid-derived tumor necrosis factor- α converting enzyme inhibitors employing comparative mol. field anal. and comparative mol. similarity indexes anal. techniques to investigate the structural requirements for the inhibitors, and derive a predictive model that could be used for the design of novel tumor necrosis factor- α converting enzyme inhibitors. Log P was used as an addnl. descriptor in the comparative mol. field anal. anal. to study the effects of lipophilic parameters on activity. Inclusion of log P did not improve the models significantly. The statistically significant model was established with 45 mols., which were validated by a test set of 11 compds. Ligand mol. superimposition on the template structure was performed by the atom-/shape-based root mean square fit and database alignment methods. Docked conformer based alignment (V) yielded the best predictive comparative mol. field anal. model r2cv = 0.673, r2ncv = 0.860, F-value = 86.073, predictive r2 = 0.642, with two components, standard error of prediction = 0.394 and standard error of ests. = 0.243 while the comparative mol. similarity indexes anal. model yielded r2cv = 0.635, r2ncv = 0.858, F-value = 84.451, predictive r2 = 0.441 with three components, standard error of prediction = 0.393 and standard error of ests. = 0.245. The contour maps obtained from three-dimensional quant. structure-activity relationship studies were appraised for activity trends for the mols. analyzed. The comparative mol. field anal. models exhibited good external predictivity as compared with that of comparative mol. similarity indexes anal. models. The model generated through comparative mol. field anal. was validated with the IK-682. The data generated from this study may guide our efforts in designing and predicting the tumor necrosis factor- α converting enzyme inhibitory activity of novel mols.

IT 478911-60-3, IK-682

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(3D-QSAR CoMFA and CoMSIA models for aminohydroxamic acid-derived TNF- α converting enzyme inhibitors)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT: THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS

ANSWER 4 OF 83 CA COPYRIGHT 2009 ACS on STN 150:136096 CA ACCESSION NUMBER:

TITLE: Discovery of novel spirocyclopropyl hydroxamate and

carboxylate compounds as TACE inhibitors

AUTHOR(S):

Guo, Zhuyan; Orth, Peter; Wong, Shing-Chun; Lavey, Brian J.; Shih, Neng-Yang; Niu, Xiaoda; Lundell, Daniel J.; Madison, Vincent; Kozlowski, Joseph A.

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CORPORATE SOURCE: Department of Chemistry, Schering-Plough Research

Institute, Kenilworth, NJ, 07033-0539, USA

Bioorganic & Medicinal Chemistry Letters (2009), SOURCE:

19(1), 54-57 CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal English LANGUAGE:

CASREACT 150:136096 OTHER SOURCE(S):

AB We have discovered nanomolar inhibitors of TNF- α convertase (TACE) comprised of a novel spirocyclic scaffold and either a carboxylate or hydroxamate zinc binding moiety. X-ray crystal structures and computer models of selected compds. binding to TACE explain the observed SAR. We report the first TACE X-ray crystal structure for an inhibitor with a carboxylate zinc ligand.

IT 478911-60-3, IK 682

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Discovery of novel spirocyclopropyl hydroxamate and carboxylate compds. as TACE inhibitors)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 83 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 150:90600 CA

PATENT ASSIGNEE(S): Galderma Research & Development, Fr.

SOURCE: PCT Int. Appl., 24pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT		DATE					
WO 2009004247								0108	,	WO 2		20080618						
WO		009004247					2009			Z, BA, BB, BG, BH, BR, BW, BY, I								
	W:	ΑE,	AG,	AL,	ΑM,	ΑO,	ΑT,	ΑU,	ΑZ,	BΑ,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
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		FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	
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		ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	
		ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	
		AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AP,	EA,	EP,	OA				
FR	2917	427			A1		2008	1219		FR 2	007-	5581	9		20070618			
FR	2917	427			В1		2009	0821										

PRIORITY APPLN. INFO.: FR 2007-55819 A 20070618

AB The invention discloses an in vitro method for screening for candidate compds. for the preventive or curative treatment of acne, comprising the determination of the ability of a compound to inhibit the expression or the activity

of TACE. The invention also discloses the use of inhibitors of the expression or the activity of TACE for treating acne.

IT 478911-60-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(TNF-\$\alpha\$-converting enzyme (TACE) inhibitors for treatment of acne, and screening method)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

N O

PAGE 2-A

L6 ANSWER 6 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 150:639 CA

TITLE: Effects of $TNF\alpha$ -converting enzyme inhibition on

amyloid β production and APP processing in vitro

and in vivo

AUTHOR(S): Kim, Minkyu L.; Zhang, Bin; Mills, Ian P.; Milla,

Marcos E.; Brunden, Kurt R.; Lee, Virginia M.-Y.

CORPORATE SOURCE: Center for Neurodegenerative Disease Research,

Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine,

Philadelphia, PA, 19104, USA

SOURCE: Journal of Neuroscience (2008), 28(46), 12052-12061

CODEN: JNRSDS; ISSN: 0270-6474

PUBLISHER: Society for Neuroscience

DOCUMENT TYPE: Journal LANGUAGE: English

AB Tumor necrosis factor- α (TNF α) is a proinflammatory cytokine that is elevated in Alzheimer's disease (AD) brains. Because TNF α is released from cell membranes by the TNF α -converting enzyme

(TACE), inhibition of TACE has the potential to mitigate TNF α

effects in AD brain. TACE also cleaves amyloid precursor protein (APP) and generates sAPPa, precluding the formation of potentially harmful amyloid β (A β) peptides by β -site APP cleaving enzymes (BACE). Hence, the anti-inflammatory benefits of TACE inhibition might be offset by an increase in $A\beta$. We have examined the effects of the highly selective TACE inhibitor, BMS-561392, on APP processing in vitro and in vivo. In Chinese hamster ovary cells expressing APP, BMS-561392 significantly reduced secretion of sAPP α without a corresponding increase in $A\beta$ production Conversely, a BACE inhibitor decreased sAPP β and A β peptides with no change in the secretion of $\mathtt{sAPP}\alpha.$ These data indicate an absence of TACE and BACE competition for the APP substrate. Despite this, we observed competition for APP when TACE activity was enhanced via phorbol ester treatment or if APP was modified such that it was retained within the trans-Golgi network (TGN). These results suggest that BACE and TACE share a common TGN localization, but under normal conditions do not compete for APP. To confirm this finding in vivo, BMS-561392 was infused into the brains of Tg2576 and wild-type mice. Although decreased brain sAPP α levels were observed, steady-state $A\beta$ levels were not significantly changed. Accordingly, it is possible that TACE inhibitors could reduce $\mathtt{TNF}\alpha$ levels without increasing $A\beta$ levels within the AD brain.

IT 611227-74-8, BMS-561392

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of TNF $\!\alpha\!$ -converting enzyme inhibition on amyloid β production and APP processing in vitro and in vivo)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

N O

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:524299 CA

TITLE: Drug Insight: tumor necrosis factor-converting enzyme

as a pharmaceutical target for rheumatoid arthritis

AUTHOR(S): Moss, Marcia L.; Sklair-Tavron, Liora; Nudelman,

Raphael

CORPORATE SOURCE: BioZyme Inc, Apex, NC, 27523, USA

SOURCE: Nature Clinical Practice Rheumatology (2008), 4(6),

300-309

CODEN: NCPRCF; ISSN: 1745-8382

PUBLISHER: Nature Publishing Group DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Drugs that inhibit tumor necrosis factor (TNF) provide considerable benefit in treatment of rheumatoid arthritis (RA); however, there is an unmet medical need for alternative therapies with higher clin. benefit and lower safety risk and cost. The potential to treat RA by targeting TNF-converting enzyme, which promotes the release of soluble TNF

ΙT

from its membrane-bound precursor, is outlined in this Review. The success of agents that inhibit tumor necrosis factor (TNF), such as infliximab, adalimumab and etanercept, has led to a desire for orally available small mols. that have a better safety profile and are less costly to produce than current agents. One target for anti-TNF therapy that is currently under investigation is TNF-converting enzyme, which promotes the release of soluble TNF from its membrane-bound precursor. Inhibitors of this enzyme with drug-like properties have been made and tested in the clinic. These inhibitors include TMI-005 and BMS-561392, both of which have entered into phase II clin. trials. This article summarizes preclin. and clin. findings regarding the use of inhibitors of TNF-converting enzyme for the treatment of rheumatoid arthritis. 611227-74-8, BMS-561392

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tumor necrosis factor-converting enzyme inhibitors such as TMI-005 and BMS-561392 may be beneficial for treatment of patient with rheumatoid arthritis)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

N O

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS

RECORD (11 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:576330 CA

TITLE: Role of P-glycoprotein and the intestine in the

excretion of DPC 333 in rodents

AUTHOR(S): Garner, C. Edwin; Solon, Eric; Lai, Chii-Ming; Lin,

Jianrong; Luo, Gang; Jones, Kevin; Duan, Jingwu; Decicco, Carl P.; Maduskuie, Thomas; Mercer, Stephen E.; Gan, Lian-Shen; Qian, Mingxin; Prakash, Shimoga;

Shen, Huey-Shin; Lee, Frank W.

CORPORATE SOURCE: Infection and Cancer Discovery, AstraZeneca PLC,

Waltham, MA, USA

SOURCE: Drug Metabolism and Disposition (2008), 36(6),

1102-1110

CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

The role of the intestine in the elimination of $(2R)-2-\{(3R)-3-amino-3-[4-(2-methylquinolin-4-ylmethoxy)phenyl]-2$ oxopyrrolidin-1-yl}-N-hydroxy-4-methylpentanamide (DPC 333), a potent inhibitor of tissue necrosis factor α -converting enzyme, was investigated in mice and rats in vivo and in vitro. In Madine-Darby canine kidney cells stably transfected with P-glycoprotein (P-gp) and DPC 333, the transport from $B\rightarrow A$ reservoirs exceeded the transport from A-B by approx. 7-fold. In Caco-2 monolayers and isolated rat ileal mucosa, DPC 333 was transported from basolateral to apical reservoirs in a concentration-dependent, saturable manner, and transport was blocked by N-(4-[2-(1,2,3,4-tetrahydro-6,7-dimethoxy-2-isoquinolinyl)ethyl]-phenyl)-9,10-dihydro-5-methoxy-9-oxo-4-acridine carboxamide (GF120918), confirming the contribution of P-gp/breast cancer resistance protein in $B\rightarrow A$ efflux of DPC 333. In quant. whole body autoradiog. studies with [14C]DPC 333 in mice and rats, radioactivity was distributed throughout the small intestine in both species. In GF120918-pretreated bile duct-cannulated rats, radioactivity in feces was reduced 60%. Using the in situ perfused rat intestine model, .apprx.20% of an i.v. dose of [14C]DPC 333 was measured in the intestinal lumen within 3 h postdose, 12% as parent. Kinetic anal. of data suggested that excreted DPC 333 may be further metabolized in the gut. Intestinal clearance was 0.2 to 0.35~l/h/kg. The above data suggest that in the rodent the intestine serves as an organ of DPC 333 excretion, mediated in part by the transporter P-gp.

IT 611227-74-8, DPC 333
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PKT
 (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES
 (Uses)

(role of P-glycoprotein and the intestine in excretion of DPC 333 in rodents)

611227-74-8 CA RN

1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-CN [(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3R)- (CA INDEX

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD 1

(1 CITINGS)

REFERENCE COUNT: THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS 44

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:528846 CA

TITLE: Potent, selective, orally bioavailable inhibitors of

tumor necrosis factor- α converting enzyme (TACE): Discovery of indole, benzofuran,

imidazopyridine and pyrazolopyridine P1' substituents AUTHOR(S):

Lu, Zhonghui; Ott, Gregory R.; Anand, Rajan; Liu,

Rui-Qin; Covington, Maryanne B.; Vaddi, Krishna; Qian,

10/585420

Mingxin; Newton, Robert C.; Christ, David D.;

Trzaskos, James; Duan, James J.-W.

CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research

Institute, Princeton, NJ, 08543-4000, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2008),

18(6), 1958-1962

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:528846

AB Potent and selective inhibitors of tumor necrosis factor- α converting enzyme (TACE) were discovered with several new heterocyclic P1' groups in conjunction with cyclic β -amino hydroxamic acid scaffolds. Among them, the pyrazolopyridine provided the best overall profile when combined with tetrahydropyran β -amino hydroxamic acid scaffold. Specifically, inhibitor 49 showed IC50 value of 1 nM against porcine TACE and 170 nM in the suppression of LPS-induced TNF- α of human whole blood. Compound 49 also displayed excellent selectivity over a wide panel of MMPs as well as excellent oral bioavailability (F% > 90%) in rat n-in-1 PK studies.

IT 478911-60-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral TACE inhibitors: discovery of indole, benzofuran, imidazopyridine and pyrazolopyridine P1' substituents)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

N O

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:528835 CA

TITLE: Potent, exceptionally selective, orally bioavailable

inhibitors of TNF- α Converting Enzyme (TACE): Novel 2-substituted-1H-benzo[d]imidazol-1-

yl)methyl)benzamide P1' substituents

AUTHOR(S): Ott, Gregory R.; Asakawa, Naoyuki; Lu, Zhonghui;

Anand, Rajan; Liu, Rui-Qin; Covington, Maryanne B.; Vaddi, Krishna; Qian, Mingxin; Newton, Robert C.; Christ, David D.; Trzaskos, James M.; Duan, James

J.-W.

CORPORATE SOURCE: Departments of Discovery Chemistry and Discovery

Biology, Bristol-Myers Squibb Research and

Development, Princeton, NJ, 08543, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2008),

18(5), 1577-1582 CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:528835

AB Novel ((2-substituted-1H-benzo[d]imidazol-1-yl)methyl)benzamides were found to be excellent P1' substituents in conjunction with unique constrained β -amino hydroxamic acid scaffolds for the discovery of potent selective inhibitors of TNF- α Converting Enzyme (TACE). Optimized examples proved potent for TACE, exceptionally selective over a

wide panel of MMP and ADAM proteases, potent in the suppression of LPS-induced TNF- α in human whole blood and orally bioavailable.

IT 1023283-73-9

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral inhibitors of TACE: novel

2-substituted-1H-benzo[d]imidazol-1-y1)methyl)benzamides)

RN 1023283-73-9 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropy1)-3-[4-[2-(methylthio)-1H-benzimidazol-1-y1]methyl]phenyl]-2-oxo-, (α R, 3R)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:515752 CA

TITLE: Compositions and methods comprising

 $TNF-\alpha$ -inhibiting compounds and immune response

enhancer for treating and preventing anthrax lethality

INVENTOR(S): Martin, Edward N., Jr.; Scheld, W. Michael PATENT ASSIGNEE(S): University of Virginia Patent Foundation, USA

SOURCE: PCT Int. Appl., 86pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	NO.			KIND DATE						-	ION :		DATE				
WO	2008	0545	32		A9		2008	0626					20070508					
WO	2008054532				A3		2008	1127										
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	ΒZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	
		GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	
		KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ΜE,	MG,	
		MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	
		RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,	
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	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
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AB The present invention provides compns. and methods for preventing and inhibiting anthrax lethality. The present invention relates to protect a subject from anthrax lethality by presensitizing a subject prior to

RN

anthrax infection. The present invention further provides compns. and methods for enhancing the innate system to inhibit anthrax-associated lethality. The invention further provides compns. and methods for preventing and inhibiting lethality due to infection regulated via a ${\rm TNF-}\alpha$ pathway. The compns. and methods comprise ${\rm TNF-}\alpha{\rm -inhibiting}$ compds. selected from peptide, protein, nucleic acid, antisense oligonucleotide, siRNA, aptamer, kinase inhibitor, soluble TNFR1 receptor or antibody.

IT 611227-74-8, BMS561392

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. and methods comprising TNF- α -inhibiting compds. and immune response enhancer for treating and preventing anthrax lethality) 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L6 ANSWER 12 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:472035 CA

TITLE: Preparation of acylaminopyrazoles as thrombin

inhibitors

INVENTOR(S): Bauser, Marcus; Buchmueller, Anja; Degenfeld, Georges;

Dittrich-Wengenroth, Elke; Gerdes, Christoph; Gnoth,

Mark Jean; Gottschling, Dirk; Heitmeier, Stefan;

Hendrix, Martin; Koebberling, Johannes; Lang, Dieter; Rester, Ulrich; Saatmann, Uwe; Tersteegen, Adrian;

Bruens, Astrid

PATENT ASSIGNEE(S): Bayer HealthCare A.-G., Germany

SOURCE: PCT Int. Appl., 96pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT				KIN	KIND DATE APPLICATION NO.														
					A1	_										DATE 20071005 A, BZ, CA, B, ES, FI, C, KE, KG, MD, ME, G, PH, PL, TM, TN, TM, TN, TM, TN, A, HU, IE, TR, BF, TG, BW, AM, AZ, 20061017 20071005 A, HU, IE, C, TR, BF, D, TG, BW, J, AM, AZ,				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,			
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OTHER SOURCE(S): MARPAT 148:472035

GΙ

Title compds. I [R1 = Ph, 5 or 6-membered heteroaryl; R2 = Ph, 5 or 6-membered heteroaryl; R3 = H; R4 = alkyl, alkenyl, cyclaolkyl; R5 = H, halo, OH, etc.; R6 = Ph, 5 or 6-membered heteroaryl, cycloalkyl, etc.] and their pharmaceutically acceptable salts and formulations were prepared For example, coupling of amine II and 3,4-dimethoxybenzeneacetic acid afforded acylaminopyrazole III in 92% yield. In thrombin inhibition assays, 7-examples of compds. I exhibited IC50 values ranging from 0.48-34 nM.

IT 1020653-31-9P

T 1020653-31-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(preparation of acylaminopyrazoles as thrombin inhibitors)

RN 1020653-31-9 CA

CN 1-Pyrrolidineacetamide, 3-(3,4-dimethoxyphenyl)-N-(1,4-diphenyl-1H-pyrazol-3-y1)-2-oxo- (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:449634 CA

TITLE: Preparation of acyl aminoimidazoles for the treatment

of thromboembolic diseases

INVENTOR(S): Bauser, Marcus; Buchmueller, Anja; Von Degenfeld,

Georges; Dittrich-Wengenroth, Elke; Gerdes, Christoph;

Gnoth, Mark Jean; Gottschling, Dirk; Heitmeier,

Stefan; Hendrix, Martin; Koebberling, Johannes; Lang,

Dieter; Rester, Ulrich; Saatmann, Uwe; Tersteegen,

Adrian; Bruens, Astrid

PATENT ASSIGNEE(S): Bayer Healthcare AG, Germany

SOURCE: PCT Int. Appl., 95pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE APPLICATION NO.							DATE				
					A2 20080417 A3 20080703					WO 2	007-	20071010						
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	
		GH,	GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑP,	EA,	EP,	OA						
DE	1020	0604	8042		A1 20080417 DE 2006-102006048042								8042	20061011				
CA	2666	177			A1		2008	0417		CA 2	007-	2666	177		2	0071	010	
EP	2079	708			A2		2009	0722		EP 2	007-	8188	62		2	0071	010	
	R:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
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										WO 2	007-	EP87	89	1	₩ 2	0071	010	
OTHER SO							WO 2007-EP8789 W 20071010 MARPAT 148:449634											

AB Title compds. I [X = NH, S; R1 = Ph, 5 or 6-membered heteroaryl ring; R2 = Ph, 5 or 6-membered heteroaryl ring; R3 = H, Me; R4 = alkyl, alkenyl, cycloalkyl; R5 = H, halo, OH, etc.; R6 = Ph, 5 or 6-membered heteroaryl ring] and their pharmaceutically acceptable salts and formulations were prepared For example, carbodimmide coupling of 3,4-dimethoxyphenylacetic acid and amine II afforded aminoimidazole III in 88% yield. In thrombin inhibition assays, 6-examples of compds. I exhibited IC50 values ranging from 0.7-42 nM.

IT 1019703-77-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of acyl aminoimidazoles for the treatment of thromboembolic diseases)

RN 1019703-77-5 CA

CN 1-Pyrrolidineacetamide, 3-(3,4-dimethoxyphenyl)-N-[2-(5-fluoro-2-thienyl)-4-phenyl-1H-imidazol-5-yl]-2-oxo- (CA INDEX NAME)

L6 ANSWER 14 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:439861 CA

TITLE: Pharmacokinetics and pharmacodynamics of DPC 333

((2R)-2-((3R)-3-amino-3{4-[2-methyl-4-quinoliny1)
methoxy] phenyl}-2-oxopyrrolidinyl)-N-hydroxy-4methylpentanamide)), a potent and selective inhibitor

of tumor necrosis factor α -converting enzyme in

rodents, dogs, chimpanzees, and humans

AUTHOR(S): Qian, Mingxin; Bai, Stephen A.; Brogdon, Bernice; Wu,

Jing-Tao; Liu, Rui-Qin; Covington, Maryanne B.; Vaddi, Kris; Newton, Robert C.; Fossler, Michael J.; Garner, C. Edwin; Deng, Yuzhong; Maduskuie, Thomas; Trzaskos, James; Duan, James J.-W.; Decicco, Carl P.; Christ,

David D.

CORPORATE SOURCE: Metabolism and Pharmacokinetics, Bristol-Myers Squibb

Company, Princeton, NJ, USA

SOURCE: Drug Metabolism and Disposition (2007), 35(10),

1916-1925

CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

AB DPC 333 is a potent and selective inhibitor of tumor necrosis factor

(TNF)- α -converting enzyme (TACE). It significantly inhibits

lipopolysaccharide-induced soluble TNF- α production in blood from rodents,

chimpanzee, and human, with IC50 values ranging from 17 to 100 nM. In rodent models of endotoxemia, DPC 333 inhibited the production of TNF- α in a dose-dependent manner, with an oral ED50 ranging from 1.1 to 6.1 mg/kg. Oral dosing of DPC 333 at 5.5 mg/kg daily for 2 wk in a rat collagen antibody-induced arthritis model suppressed the maximal response by approx. 50%. DPC 333 was distributed widely to tissues including the synovium, the site of action for antiarthritic drugs. Pharmacokinetic and pharmacodynamic studies in chimpanzee revealed a systemic clearance of 0.4 1/h/kg, a Vss of 0.6 1/kg, an oral bioavailability of 17%, and an ex vivo IC50 for the suppression of TNF- α production of 55 nM (n = 1). In a phase I clin. trial with male volunteers after single escalating doses of oral DPC 333, the terminal half-life was between 3 and 6 h and the ex vivo IC50 for suppressing TNF- α production was 113 nM. Measurement of the suppression of $TNF-\alpha$ production ex vivo may serve as a good biomarker in evaluating the therapeutic efficacy of TACE inhibitors. Overall, the pharmacol. profiles of DPC 333 support the notion that suppression of ${\tt TNF-}\alpha$ with TACE inhibitors like DPC 333 may provide a novel approach in the treatment of various inflammatory diseases including rheumatoid arthritis, via control of excessive TNF- α production

IT 611227-74-8, DPC 333

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(TNF- α -converting enzyme inhibitor DPC 333 pharmacokinetics/pharmacodynamics in rodents, dogs, chimpanzees, and humans)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT: THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS) REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 15 OF 83 CA COPYRIGHT 2009 ACS on STN

147:385912 CA ACCESSION NUMBER:

TITLE:

Synthesis and structure-activity relationship of a

novel, non-hydroxamate series of TNF- α

converting enzyme inhibitors

AUTHOR(S): Gilmore, John L.; King, Bryan W.; Asakawa, Naoyuki;

Harrison, Kimberly; Tebben, Andrew; Sheppeck, James E.; Liu, Rui-Qin; Covington, Maryanne; Duan, James

J.-W.

CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research

Institute, Princeton, NJ, 08543-4000, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(16), 4678-4682

CODEN: BMCLE8; ISSN: 0960-894X

Elsevier Ltd. PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:385912

AB A novel series of TNF- α converting enzyme (TACE) inhibitors which are non-hydroxamate have been discovered. These compds, use a triazolethione moiety as the zinc binding ligand and exhibit IC50 values from 1.5 to 100 nM in a porcine TACE assay. They also had excellent selectivities over other MMPs.

IT 950523-37-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of triazolethione derivs. via amidation of carboxylic acids with thiosemicarbazide followed by intramol. cyclization, and their TNF- α converting enzyme inhibitory activity and SAR)

RN 950523-37-2 CA

CN 1-Pyrrolidineacetic acid, 3-amino- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:257752 CA

TITLE: Preparation of heterocyclic compounds as integrin

inhibitors for disease treatment and diagnosis

INVENTOR(S): Zischinsky, Gunther; Stragies, Roland; Osterkamp, Frank; Scharn, Dirk; Hummel, Gerd; Kalkhof, Holger;

Zahn, Grit; Vossmeyer, Doerte; Christner-Albrecht,

Claudia; Reineke, Ulrich

PATENT ASSIGNEE(S): Jerini A.-G., Germany SOURCE: PCT Int. Appl., 224pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT :	NO.			KIN		DATE			APP:	LICAT		DATE				
WO	2007	0880	 41		A1		2007	0809		——— WO	 2007-:	EP83.	 2		2	 0070	131
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ	, EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
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		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM	, SV,	SY,	ТJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM	, ZW						
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
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		BA,	HR,	MK,	RS												
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ZA	2008	0049	32		Α		2009	0624			2008-					0800	604
MX	2008	0088	66		A		2008	1023		MX .	2008-	8866			2	0800	709
KR	2008	0958	54		Α		2008	1029			2008-					0800	
IN	IN 2008MN01615						2009	0116		IN.	2008-1	MN16	15		2	0800	729
											2007-					0080	731
US	2009	0104	116		A1		2009	0423		US .	2008-	1627	98		2	0800	731
PRIORIT	IORITY APPLN. INFO.:										2006-					0060	131
										WO .	2007-	EP83.	2	1	W 2	0070	131

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 147:257752

GI

The present invention is related to a compound of formula $G-Z-A-Ar-Y-\Psi$ AB (I), wherein A is a nonarom. heterocyclic ring.; Ar is either absent or phenylene; G is a radical containing one or more moieties selected from the group consisting of NH, OH and a basic moiety; Z and Y are alkyl chains containing O, S, N, etc.; Ψ is a radical of general formula C(R1)-C(R4)(COR3)-Q-R2 (wherein R1 is H alkyl, cycloalkyl, etc., R2 is a hydrophobic moiety; R3 is OH C1-C8 alkyloxy, and aryl C0-C6 alkyloxy; R4 is H, halo, or C1-C4 alkyl; Q is CO, CS, etc.). The compds. are inhibitors of integrins, especially antagonists of the fibronectin receptor $\alpha 5 \beta 1$, useful as anti-angiogenic agents. Preparation of I is exemplified. For example, II was prepared in a multistep synthesis involving the key step of reacting 3-(4-boronopheny1)-2-(2,4,6-trimethylbenzoylamino)propionic acid and (4-methylpyridin-2-yl)piperidin-4-ylmethylcarbamic acid tert-Bu ester. an $\alpha 5\beta 1$ -fibronectin binding assay, II had an IC50 of < 100 nM. I can comprise a further moiety, preferably a moiety which is selected from the group comprising a targeted moiety, a delivery moiety, and a detection moiety.

IT 945672-23-1P, 2-(2-0xo-3-phenylpyrrolidin-1-yl)-3-[4-[4-[[(pyridin-2-yl)amino]methyl]piperidin-1-yl]phenyl]propanoic acid
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of heterocyclic compds. as integrin inhibitors for disease treatment and diagnosis)

RN 945672-23-1 CA

CN 1-Pyrrolidineacetic acid, 2-oxo-3-phenyl- α -[[4-[4-[(2-pyridinylamino)methyl]-1-piperidinyl]phenyl]methyl]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:227239 CA

TITLE: Methods, compositions, and kits using

pyrimidopyrimidine derivatives and other agents for the treatment of musculoskeletal disorders and

the treatment of musculoskeretal disorders

associated symptoms

INVENTOR(S): Lessem, Jan N.; Zhang, Yanzhen PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA

SOURCE: PCT Int. Appl., 123pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
APPLICATION NO.
    WO 2007089617 A2 2007
    PATENT NO.
                       KIND DATE
                                                                 DATE
                        A2 20070809 WO 2007-US2224 20070125
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
            KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
            MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
            RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM
    US 20070213308 A1 20070913
                                           US 2007-698240
                                                                  20070125
                        T
    JP 2009527465
                              20090730
                                           JP 2008-552449
                                                                  20070125
                        T 20090730
A 20080924
A 20081006
                                                           20080728
20080825
P 20060126
P 2006030
                       А
    NO 2008003303
                                           NO 2008-3303
                                           KR 2008-720807
    KR 2008089512
                                           US 2006-743178P
PRIORITY APPLN. INFO.:
                                           US 2006-780028P
                                                             P 20060622
                                           US 2006-815657P
                                                              W 20070125
                                           WO 2007-US2224
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    The invention discloses methods, compns., and kits for treating a
    musculoskeletal disorder, e.g., osteoarthritis, or pain, fatigue,
    tenderness, impairment in mobility, soft tissue swelling, or bony swelling
    associated therewith, by administering to a patient diagnosed with or at risk
    of developing such pain, fatigue, tenderness, impairment in mobility, soft
    tissue swelling, or bony swelling a tetra-substituted pyrimidopyrimidine,
    e.g., dipyridamole, or an adenosine activity upregulator, in combination
    with one or more addnl. agents. The invention further discloses methods,
    compns., and kits for treating a patient diagnosed with, or at risk of
    developing, a musculoskeletal disorder by administering to the patient a
    tetra-substituted pyrimidopyrimidine or an adenosine activity upregulator
    in combination with one or more addnl. agents.
ΙT
    611227-74-8, DPC 333
```

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

musculoskeletal disorders and associated symptoms)

(pyrimidopyrimidine derivs. and other agents for treatment of

1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-

 $[(2-\text{methyl}-4-\text{quinolinyl})\text{methoxy}]\text{phenyl}]-2-\text{oxo-}, (\alpha R, 3R)-$ (CA INDEX

Absolute stereochemistry.

NAME)

611227-74-8 CA

(Biological study); USES (Uses)

RN

CN

PAGE 1-A

N O

PAGE 2-A

L6 ANSWER 18 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:109058 CA

TITLE: Hydantoins, triazolones, and imidazolones as selective

non-hydroxamate inhibitors of tumor necrosis

factor- α converting enzyme (TACE)

AUTHOR(S): Sheppeck, James E., II; Gilmore, John L.; Tebben,

Andrew; Xue, Chu-Biao; Liu, Rui-Qin; Decicco, Carl P.;

Duan, James J.-W.

CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research

Institute, Princeton, NJ, 08543-4000, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(10), 2769-2774

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:109058

AB We have discovered selective and potent inhibitors of TACE that replace the common hydroxamate zinc binding group with a hydantoin, triazolone, and imidazolone heterocycle. These novel heterocyclic inhibitors of a

10/585420

zinc metalloprotease were designed using a pharmacophore model that we previously described while developing hydantoin and pyrimidinetrione (barbiturate) inhibitors of TACE. The potency and binding orientation of these inhibitors is discussed and they are modeled into the X-ray crystal structure of TACE and compared to hydroxamate and earlier hydantoin TACE inhibitors which share the same 4-[(2-methyl-4-quinolinyl)methoxy]benzoyl P1' group.

IT 478911-60-3, IK682

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of hydantoins, triazolones, and imidazolones as non-hydroxamate TACE inhibitors)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α ,3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT:

14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 19 OF 83 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                          147:644 CA
TITLE:
                          Effect of DPC 333
                          [(2R)-2-\{(3R)-3-amino-3-[4-(2-methylquinolin-4-
                          ylmethoxy)phenyl]-2-
                          oxopyrrolidin-1-yl}-N-hydroxy-4-methylpentanamide], a
                          human tumor necrosis factor \alpha-converting enzyme
                          inhibitor, on the disposition of methotrexate: a
                          transporter-based drug-drug interaction case study
AUTHOR(S):
                          Luo, Gang; Garner, C. Edwin; Xiong, Hao; Hu, Hanbo;
                          Richards, Lauren E.; Brouwer, Kim L. R.; Duan, Jingwu;
                          Decicco, Carl P.; Maduskuie, Thomas; Shen, Helen; Lee,
                          Frank W.; Gan, Liang-Shang
                          Preclinical Candidate Optimization-Metabolism and
CORPORATE SOURCE:
                          Pharmacokinetics, Bristol-Myers Squibb Company,
                          Pennington, NJ, USA
SOURCE:
                          Drug Metabolism and Disposition (2007), 35(6), 835-840
                          CODEN: DMDSAI; ISSN: 0090-9556
PUBLISHER:
                          American Society for Pharmacology and Experimental
                          Therapeutics
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     DPC 333 [(2R)-2-\{(3R)-3-amino-3-[4-(2-methylquinolin-4-ylmethoxy)phenyl]-2-
      oxopyrrolidin-1-yl}-N-hydroxy-4-methylpentanamide] is a potent human
     tumor necrosis factor \alpha\text{-converting} enzyme inhibitor with potential
     therapeutic implications for rheumatoid arthritis. Methotrexate (MTX), a
     drug for the treatment of rheumatoid arthritis, is eliminated primarily
     unchanged via renal and biliary excretion in humans as well as in rats and
     dogs. The objective of the present study was to investigate the potential
     effect of DPC 333 on the disposition of MTX. In dogs, DPC 333
     administered orally at 1.7 mg/kg 15 min before the i.v. administration of
     [14C]MTX (0.5 mg/kg) did not alter the plasma concentration-time profile of
MTX;
     however, the total amount of radioactivity excreted in urine increased from
     58.7% to 92.2% of the dose, and the renal clearance increased from 1.8
     mL/min/kg to 2.9 mL/min/kg, suggesting a decrease in MTX disposition via
     biliary excretion. The biliary excretion of MTX was investigated in
     isolated perfused livers prepared from wild-type and TR- [multidrug
     resistance-associated protein 2 (Mrp2)-deficient] Wistar rats in the absence
     and presence of DPC 333. Mrp2-mediated biliary excretion of MTX was
     confirmed with 95.8% and 5.1% of MTX recovered in the bile of wild-type
     and TR- Wistar rats, resp. DPC 333 at an initial perfusate concentration of 50
     \mu\text{M} completely blocked the biliary excretion of MTX, but not the
     clearance from perfusate, in both wild-type and TR- rats. These results
     suggest that the enhanced renal elimination of MTX may be due to the
     potent inhibition of biliary excretion and active renal resorption by DPC
     333 and/or its metabolites.
     611227-74-8, DPC 333
ΙT
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses) (effect of DPC 333, a human tumor necrosis factor \alpha-converting
        enzyme inhibitor, on disposition of methotrexate in a transporter-based
        drug-drug interaction case study)
RN
     611227-74-8 CA
     1-Pyrrolidineacetamide, 3-amino-N-hydroxy-\alpha-(2-methylpropy1)-3-[4-
CN
     [(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (\alpha R, 3R)- (CA INDEX
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NAME)

Absolute stereochemistry.

PAGE 1-A

N O

PAGE 2-A

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:528400 CA

TITLE: Medical stent provided with inhibitors of tumor

necrosis factor-alpha

INVENTOR(S): Jukema, Johan Wouter; Quax, Paulus Hubertus Andreas;

Horvers, Ronald Adrianus Maria

PATENT ASSIGNEE(S): Picarus NV SA, Luxembourg

SOURCE: PCT Int. Appl., 32pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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APPLICATION NO.
                               DATE
     PATENT NO.
                        KIND
                                                                  DATE
                                          _____
                        ----
                                                                  _____
     _____
                        A1 20070518 WO 2005-EP11943
     WO 2007054108
                                                                 20051108
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                     T
     JP 2009514623
                               20090409
                                           JP 2008-539253
                                                                  20051108
                                         WO 2006-EP10695
     WO 2007054281
                        A1
                               20070518
                                                                  20061108
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                        A1 20090903
                                                                  20080814
     US 20090222080
                                           US 2008-93095
                                           WO 2005-EP11943
PRIORITY APPLN. INFO.:
                                                              W 20051108
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The present invention relates to a stent provided with a composition comprising
     at least one inhibitor of TNF-alpha for use in treating smooth muscle cell
     proliferation, such as stenosis and preventing restenosis in vascular
ΙT
     611227-74-8, DPC333
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (medical stent provided with inhibitors of tumor necrosis factor-alpha)
RN
     611227-74-8 CA
     1-Pyrrolidineacetamide, 3-amino-N-hydroxy-\alpha-(2-methylpropyl)-3-[4-
CN
     [(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (\alphaR, 3R)- (CA INDEX
     NAME)
```

PAGE 2-A

7 REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:374743 CA

TITLE: A molecular modeling analysis of novel non-hydroxamate

inhibitors of TACE

Sheppeck, James E.; Tebben, Andrew; Gilmore, John L.; AUTHOR(S):

Yang, Anle; Wasserman, Zelda R.; Decicco, Carl P.;

Duan, James J.-W.

CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research

Institute, Princeton, NJ, 08543-4000, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(5), 1408-1412 CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Recently, an X-ray co-crystal structure of our hydroxamate inhibitor IK682

and TACE was published that explicitly shows the orientation of the

hydroxamate and the TACE-selective

4-[(2-methyl-4-quinolinyl)methoxy]phenyl P1' group in the S1' and S3' sites. The preceding paper described a novel series of potent and TACE-selective hydantoins and we previously described pyrimidinetrione (barbiturate) inhibitors of TACE, both of which contain the same P1' group as IK682. Using this TACE-selective P1' group as an anchor, stereochem. and conformational constraints in the inhibitors, and restrictions to the active site Zn coordination geometry, we developed a highly plausible and predictive pharmacophore model that rationalizes the observed TACE activity of all three inhibitors.

IT 478911-60-3, IK682

RL: BSU (Biological study, unclassified); BIOL (Biological study) (mol. modeling anal. of novel non-hydroxamate inhibitors of TACE)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT:

6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
146:229498 CA
ACCESSION NUMBER:
                              Targeting TNF-\alpha converting enzyme
TITLE:
                              (TACE) -dependent growth factor shedding in cancer
                              therapy
                              Kenny, Paraic A.; Bissell, Mina J.
INVENTOR(S):
PATENT ASSIGNEE(S):
                              The Regents of the University of California, USA
SOURCE:
                              PCT Int. Appl., 67 pp.
                              CODEN: PIXXD2
DOCUMENT TYPE:
                              Patent
LANGUAGE:
                              English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                             KIND DATE APPLICATION NO.
      PATENT NO.
                           KIND DATE
                                                                                DATE
                                                    ______
                              A2 20070208
A3 20071108
                                                    WO 2006-US30008
      WO 2007016597
                                                                                 20060731
      WO 2007016597
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG,
                US, UZ, VC, VN, ZA, ZM, ZW
          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
                GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
      US 20090274626
                         A1 20091105
                                                     US 2008-22049
                                                                                 20080129
                                                      US 2005-703654P P 20050729
WO 2006-US30008 A1 20060731
PRIORITY APPLN. INFO.:
      The invention provides methods for modulating tumor cell proliferation by
AΒ
      contacting cells (e.g. tumor cells) with a TACE inhibitor and a compound
      that inhibits EGFR tyrosine kinase, whereby the TACE inhibitor enhances
      the sensitivity of the cell to the EGFR tyrosine kinase inhibitor.
      Addnl., methods for treating cancer and methods for identifying TACE
      inhibitors is also provided.
ΙT
      611227-74-8, BMS 561392
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
          (targeting TNF-lpha converting enzyme (TACE)-dependent growth factor
          shedding in cancer therapy)
      611227-74-8 CA
RN
      1-Pyrrolidineacetamide, 3-amino-N-hydroxy-\alpha-(2-methylpropy1)-3-[4-
CN
      [(2-\text{methyl}-4-\text{quinolinyl})\text{methoxy}]\text{phenyl}]-2-\text{oxo-}, (\alpha R, 3R)- (CA INDEX
      NAME)
```

ANSWER 22 OF 83 CA COPYRIGHT 2009 ACS on STN

N O

PAGE 2-A

L6 ANSWER 23 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:176192 CA

TITLE: Identification of potent and selective TACE inhibitors

via the S1 pocket

AUTHOR(S): Condon, Jeffrey S.; Joseph-McCarthy, Diane; Levin,

Jeremy I.; Lombart, Henry-Georges; Lovering, Frank E.; Sun, Linhong; Wang, Weiheng; Xu, Weixin; Zhang, Yuhua

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Cambridge, MA, 02140, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2007),

17(1), 34-39

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 146:176192

AB By focusing on the P1 portion of the piperidine β -sulfone ligands we identified a motif that induces selectivity and resulted in a series of TACE inhibitors that demonstrated excellent in vitro potency against isolated TACE enzyme and excellent selectivity over MMPs 1, 2, 9, 13, and

10/585420

14.

478911-60-3 ΙT

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(piperidine sulfones as TACE inhibitors)

478911-60-3 CA RN

1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-CN quinoliny1)methoxy]pheny1]-2-oxo-, $(\alpha R, 3S)$ - (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT: THERE ARE 12 CAPLUS RECORDS THAT CITE THIS 12

RECORD (12 CITINGS)

THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 24

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 24 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:163389 CA

TITLE: Preparation of amino acids phthalamide and succinimide

derivatives as inhibitors of DNA methyl transferases Hamlyn, Richard John; Rigoreau, Laurent Jean Martin;

INVENTOR(S): Raynham, Tony Michael; Priestley, Rachael Elizabeth; Soudy, Christelle Nicole Marguerite; Lyko, Frank;

Bruckner, Bodo; Kern, Oliver Thomas

PATENT ASSIGNEE(S): Cancer Research Technology Limited, UK

SOURCE: PCT Int. Appl., 71pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
WO	2007	0070	 54		 A1	_	2007	0118		WO 2	 006-	 GB25	 17		2	0060	707
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VC,	VN,	ZA,	ZM,	ZW									
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ТJ,	$_{ m TM}$										
יידס	7 700	T NI	TNEO							CB 2	005_	1404	1		7 2	0050	708

PRIORITY APPLN. INFO.:

GB 2005-14041 A 20050708 US 2005-698176P P 20050711

OTHER SOURCE(S): CASREACT 146:163389; MARPAT 146:163389

AB The title phthalamide and succinimide derivs. of amino acids, particularly of tryptophan, or isomers, salts, solvates, or prodrugs thereof were prepared as inhibitors of DNA Me transferases (DNMTs). For example, L-tryptophan was reacted with Me 2-formylbenzoate, followed by treating with sodium cyanoborohydride to give

(2S)-2-(1-oxo-1,3-dihydroisoindol-2-yl)-3-(1H-indol-3-yl)propionic acid with 94% purity. (2S)-2-(1-0xo-1,3-dihydroisoindol-2-yl)-3-(1H-indol-3-yl)propionic acid showed inhibitory activity with IC50 < 50 $\mu\rm M$ against DNA methylation.

IT 919767-43-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of amino acids phthalamide and succinimide derivs. as inhibitors of DNMTs)

RN 919767-43-4 CA

CN 1H-Indole-3-propanoic acid, α -(2,5-dioxo-3-phenyl-1-pyrrolidinyl)-, (α S)- (CA INDEX NAME)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:93540 CA

TITLE: Combination therapy for the treatment of

immunoinflammatory disorders

INVENTOR(S): Ausspitz, Benjamin A.; Brasher, Bradley B.; Chappell,

Todd W.; Frank, Michael G.; Grau, Daniel; Jost-Price, Edward R.; Lederman, Seth; Manivfasakam, Palaniyandi;

Sachs, Noah; Smith, Brendan

PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA

SOURCE: PCT Int. Appl., 94pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2006138518	A1 20061228	WO 2006-US23414	20060615
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG,	KM, KN, KP, KR,
KZ, LA, LC,	LK, LR, LS, LT,	LU, LV, LY, MA, MD, 1	MG, MK, MN, MW,
MX, MZ, NA,	NG, NI, NO, NZ,	OM, PG, PH, PL, PT,	RO, RS, RU, SC,
SD, SE, SG,	SK, SL, SM, SY,	TJ, TM, TN, TR, TT,	TZ, UA, UG, US,
UZ, VC, VN,	ZA, ZM, ZW		
		DK, EE, ES, FI, FR,	
		PL, PT, RO, SE, SI,	
		GW, ML, MR, NE, SN,	
· · · · ·		SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,
, , ,	RU, TJ, TM		
AU 2006259359			
CA 2612353		CA 2006-2612353	
EP 1895959		EP 2006-773303	
		DK, EE, ES, FI, FR,	
		NL, PL, PT, RO, SE,	
	T 20081204	JP 2008-517122	
	A1 20070517		
MX 2007016114	A 20080605	MX 2007-16114	
NO 2008000113	A 20080227		
KR 2008017487 IN 2008CN00275	A 20080226 A 20080919	KR 2008-701409 IN 2008-CN275	20080117 20080117
IN 2000CN002/3	A 20000919	IN 2000-CN2/5	2000011/

CN 101237838 A 20080806 CN 2006-80029080 20080204 PRIORITY APPLN. INFO.: US 2005-691766P P 20050617 WO 2006-US23414 W 20060615

AB The invention features a method for treating a patient diagnosed with or at risk of developing an immunoinflammatory disorder by administration of a nonsteroidal immunophilin-dependent immunosuppressant (NsIDI) and a Group A enhancer (e.g., antifungal agent, antigout agent, anti-infective agent, antiprotozoal agent, antiviral agent, humectant, sunscreen, vitamin D compound, microtubulin inhibitor, or zinc salt) or analog or metabolite thereof. The invention also features a pharmaceutical composition containing an

NsIDI and Group A enhancer or analog or metabolite thereof for the treatment or prevention of an immunoinflammatory disorder.

IT 611227-74-8, DPC 333
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination therapy for treatment of immunoinflammatory disorders)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

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OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 26 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:87584 CA

TITLE: Composition comprising bufexamac and corticosteroid

for the treatment of inflammatory disorders

INVENTOR(S): Jost-Price, Edward Roydon; Nolan, Garry; Zimmermann,

Grant R.

PATENT ASSIGNEE(S): Combinatorx, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 40pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	мо.			KIN	D	DATE			APPL	ICAT	ION I	ΝΟ.		D.	ATE	
US	2006	0286	177		A1	_	2006	1221		US 2	006-	4545	 59		2	0060	616
AU	2006	2594	99		A1		2006	1228		AU 2	006-	2594	99		2	0060	615
CA	2612	244			A1		2006	1228		CA 2	006-	2612.	244		2	0060	615
WO	2006	1383	72		A2		2006	1228		WO 2	006-1	US23	162		2	0060	615
WO	2006	1383	72		АЗ		2007	0329									
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,
		MX,	MZ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	SC,
		SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,
		UZ,	VC,	VN,	ZA,	ZM,	ZW										
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		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
EP	1896	042			A2		2008	0312		EP 2	006-	7731	58		2	0060	615
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
JP	2008	5438	59		Τ		2008	1204		JP 2	008-	5170	64		2	0060	615
ORITY	APP	LN.	INFO	.:						US 2	005-	6919.	53P		P 2	0050	617
										WO 2	006-1	US23	162	1	W 2	0060	615

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention features a method for treating a patient diagnosed with or
at risk of developing an immunoinflammatory disorder by administering
bufexamac and a corticosteroid or other compound to the patient. The
invention also features a pharmaceutical composition containing bufexamac and a
corticosteroid or other compound for the treatment or prevention of an

immunoinflammatory disorder. For example, combination of prednisolone and bufexamac reduced lipopolysaccharide-induced $\alpha\textsc{-}\textsc{TNF}$ secretion in vitro.

IT 611227-74-8, DPC 333

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (composition comprising bufexamac and corticosteroid for treatment of immunoinflammatory disorders)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

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L6 ANSWER 27 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:3112 CA

TITLE: Crystal structure of human TNF- α convertase

mutant complexed with inhibitor for use in

structure-based rational drug design

INVENTOR(S): Beyer, Brian M.; Ingram, Richard N.; Orth, Peter;

Strickland, Corey

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S., 39pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7138264	В1	20061121	US 2003-444257	20030521
US 20070148669	A1	20070628	US 2006-582710	20061018
US 7529628	В2	20090505		
US 20090221016	A1	20090903	US 2009-420323	20090408
PRIORITY APPLN. INFO.:			US 2002-383391P	P 20020524
			US 2003-444257	A3 20030521
			US 2006-582710	A3 20061018

AB The present invention discloses a modified human tumor necrosis factor— α converting enzyme (TACE) catalytic domain, that unlike the native TACE catalytic domain, is stable at high protein concns. The present invention further discloses methods for generating crystals of the modified TACE protein in protein—ligand complexes with a number of inhibitors. In particular, the human TACE mutant V353G (vgTACE) was cocrystd. with an inhibitor, N-{3-(hydroxyaminocarbonyl)-1-oxo-(2R)-benzylprolyl}-Ile-Leu-OH. The crystal structure and atomic structural coordinates of vgTACE complexed with N-{3-(hydroxyaminocarbonyl)-1-oxo-(2R)-benzylprolyl}-Ile-Leu-OH are provided. In addition, the present invention discloses methods of using the proteins, crystals and/or three-dimensional structures obtained to

IT 478911-60-3DP, complexes with TACE catalytic domain
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)

identify compds. that can modulate the enzymic activity of TACE.

(crystal structure of human TNF- α convertase mutant complexed with inhibitor for use in structure-based rational drug design)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

PAGE 2-A

(1 CITINGS) REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 28 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:226498 CA

OS.CITING REF COUNT:

TITLE: IK682, a tight binding inhibitor of TACE

Niu, Xiaoda; Umland, Shelby; Ingram, Richard; Beyer, Brian M.; Liu, Yan-Hui; Sun, Jing; Lundell, Daniel; AUTHOR(S):

Orth, Peter

CORPORATE SOURCE: Department of Inflammation and Infection, Schering

Plough Research Institute, Kenilworth, NJ, 07033, USA

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

SOURCE: Archives of Biochemistry and Biophysics (2006),

451(1), 43-50

CODEN: ABBIA4; ISSN: 0003-9861

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

 ${\tt TNF}\alpha$ converting enzyme (TACE) is the major metalloproteinase for the

processing of $TNF\alpha$, a key inflammatory cytokine. IK682, a

hydroxamate compound, was reported to be a potent and specific TACE inhibitor. The binding kinetics of IK682 and the ectodomain of human TACE was examined The kon of IK682 was determined as $1.1\pm0.3+108$ M-1 min-1. No detectable dissociation of IK682 from TACE was observed following dialysis, dilution, and extensive washing over a maximum of 72 h. This was in contrast to the rapid dissociation of IK682 from ADAM10. LC/MS anal. of the TACE-IK682 complex after dissociation under denaturing conditions indicated that the tight binding is not due to covalent interaction. The x-ray crystal structure of TACE-IK682 complex revealed multiple binding points at the S1' and S3' sites and the movement of a loop (from Ala349 to Gly442) to accommodate the binding of the quinolinyl group of IK682 at the S3' pocket. The conformational changes of TACE may contribute significantly to the high affinity binding as a result of a more stable TACE-inhibitor complex.

IT 478911-60-3, IK682

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(IK682, a tight binding inhibitor of TNF α converting enzyme)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS

RECORD (13 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 29 OF 83 CA COPYRIGHT 2009 ACS on STN

144:412505 CA ACCESSION NUMBER:

TITLE: Benzimidazole or indole amides as inhibitors of pin1

and their preparation, pharmaceutical compositions, and use for treatment of diseases associated with

abnormal cell growth

INVENTOR(S): Do, Quyen-Quyen Thuy; Guo, Chuangxing; Humphries, Paul

Stuart; Marakovits, Joseph Timothy; Dong, Liming; Hou,

Xinjun; Johnson, Mary Catherine

PATENT ASSIGNEE(S):

Pfizer, Inc., USA PCT Int. Appl., 396 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	NO.		KIND		DATE			APPLICATION NO.					DATE				
WO 2	2006	0406	 46		A1 2000		2006	0060420		WO 2005-IB3019				20051003			003
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚM,	ΚP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
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		SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,
		YU,	ZA,	ZM,	ZW												
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
RTTY	APP	T.N	TNFO	•						IIS 2	$\cap \cap A = \emptyset$	6192	11P		P 2	NN 411	N 1 4

PRIORITY APPLN. INFO.:

US 2004-619211P P 20041014

OTHER SOURCE(S): CASREACT 144:412505; MARPAT 144:412505

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^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The invention relates to compds. of the formula I and to pharmaceutically acceptable salts and solvates thereof, wherein the variables are defined herein. The invention also relates to methods of treating abnormal cell growth in mammals by administering the compds. of formula I and to

pharmaceutical compns. for treating such disorders that contain the compds. of formula I. The invention also relates to methods of preparing the compds. of formula I. Compds. of formula I wherein Q, Q1, Q2, and Q3 are independently N, CH2 or CH, where not more than two of the Qs are N; T is CH or N; T1 is O, NH or NMe; X is NH, O, CH=, or NR'; R' is (un)substiuted alkyl; Y is CO, CH2, or CONH and derivs.; Z is H or (un)substiuted alkyl; XY and X can form a heterocyclic ring or X and Y can form a heterocyclic ring; R and V are independently H, halo, alkyl, halogenated alkyl, alkoxy, OH, NH2, CN; R1 is (un) substituted (hetero) aryl, (un) substituted aryloxy, (un) substituted arylvinyl or (un) substituted arylvinyl or (un) substituted arylalkyl(amino), etc.; R3 is CO2H, tetrazole, CO2CHR4OCOR4 or CONH2 and derivs.; R4 is H or alkyl; and their pharmaceutically acceptable salts and solvates are claimed in this invention. Example compound II was prepared by substitution of compound II with benzoxazole-2-thiol followed by hydrolysis at the ester. Addnl. 1400 example compds. were prepared in this invention. All invention compds. were evaluated for their pin1 inhibitory activity. Example compound II showed 10% inhibition at 1 μM and 73% inhibition at $10~\mu\mathrm{M}$ concentration Most of the invention compds. showed good inhibitory activity at 10 μM concentration

IT 884042-33-5P

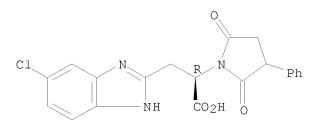
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzimidazole or indole amides as inhibitors of pin1 useful for treatment of diseases associated with abnormal cell growth)

RN 884042-33-5 CA

CN 1H-Benzimidazole-2-propanoic acid, 6-chloro- α -(2,5-dioxo-3-phenyl-1-pyrrolidinyl)-, (α R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 30 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 144:285643 CA

TITLE: Acetylenic TACE inhibitors. Part 3: Thiomorpholine

sulfonamide hydroxamates

AUTHOR(S): Levin, J. I.; Chen, J. M.; Laakso, L. M.; Du, M.;

Schmid, J.; Xu, W.; Cummons, T.; Xu, J.; Jin, G.;

Barone, D.; Skotnicki, J. S.

CORPORATE SOURCE: Wyeth Research, Pearl River, NY, 10965, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006),

16(6), 1605-1609

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:285643

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Ι

AB A series of thiomorpholine sulfonamide hydroxamate TACE inhibitors, all bearing propargylic ether P1' groups, was explored. In particular, compound I has excellent in vitro potency against isolated TACE enzyme and in cells, oral activity in a model of TNF- α production and a collagen-induced arthritis model, was selected as a clin. candidate for the treatment of rheumatoid arthritis.

IT 611227-74-8, Bms 561392 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thiomorpholine sulfonamide hydroxamate TACE inhibitors)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

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PAGE 2-A

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 31 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 143:248298 CA

TITLE: Substituted hydroxamic acid derivatives as TNF

inhibitors, their preparation and pharmaceutical

compositions

INVENTOR(S): Lohray, Braj Bhushan; Lohray, Vidya Bhushan; Jain,

Mukul R.; Thombare, Pravin S.

PATENT ASSIGNEE(S): Cadila Healthcare Limited, India

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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    WO 2005077937
                       A1 20050825 WO 2005-IN10
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            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
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                                          US 2006-585420
    US 20090192191
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                                                             A 20040109
PRIORITY APPLN. INFO.:
                                          IN 2004-MU22
                                          WO 2005-IN10
                                                            W
                                                                20050107
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMATOTHER SOURCE(S): CASREACT 143:248298; MARPAT 143:248298
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to 2-oxopyrrolidin-1-ylalkanoic acid derivs. I, which are inhibitors of matrix metalloproteinase, aggrecanase and tumor necrosis factor α secretion. In compds. I, A is CONHOH, CO2H, CH2CO2H, etc.; R1 and R2 are independently selected from H, (un) substituted linear or branched C1-8 alkyl, (un) substituted C3-7 cycloalkyl, etc.; R3 is H, SH, halo, amino, OH, alkylthio, alkoxy, etc.; X and Z are independently selected from (un)substituted C3-13 carbocycles or 5- to 14-membered heterocycles containing 1-4 heteroatoms selected from N, O, and S; and Y is an (un)substituted linker containing 0-2 carbons, optionally including O, CO, N, etc. The invention also relates to the preparation of I, pharmaceutical compns. containing I, along with a pharmaceutically acceptable carrier, diluents, excipients, or solvate, as well as to the use of the compns. for the treatment of diseases associated with excess $\text{TNF-}\alpha$ production or secretion. II was coupled with 4-hydroxymethyl-2-(methoxymethyl)quinoline to give ether III. Deprotection of III with trifluoroacetic acid gave the free amine, which underwent amidation with hydroxylamine hydrochloride, giving hydroxamic acid IV. Compound IV exhibited 92% TNF- α inhibition at 10 μM dose in a rat whole blood assay.

IT 863116-56-7P, 2-[3-Amino-3-[4-(2-methoxymethylquinolin-4-ylmethoxy)phenyl]-2-oxopyrrolidin-1-yl]-4-methylpentanoic acid hydroxyamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of hydroxamic acid derivs. as TNF inhibitors) 863116-56-7 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy-3-[4-[[2-(methoxymethyl)-4-quinolinyl]methoxy]phenyl]- α -(2-methylpropyl)-2-oxo- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 32 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

143:19989 CA

TITLE:

Methods and compositions for the treatment of

 $\hbox{immunoinflammatory disorders using pyrazolopyridine} \\ \hbox{compounds in combination with corticosteroids or other} \\$

agents

INVENTOR(S): Jost-Price, Edward Roydon; Manivasakam, Palaniyandi;

Smith, Brendan; Slavonic, Michael S.; Auspitz,

Benjamin A.

PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	KIND DATE			APPLICATION NO.						DATE								
-	WO 2005051293 WO 2005051293					A2 20050609 A3 20060302				WO 2004-US38512						20041117		
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                                                             P 20031121
PRIORITY APPLN. INFO.:
                                          US 2003-524117P
                                          WO 2004-US38512 W 20041117
OTHER SOURCE(S): MARPAT 143:19989
GΙ
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$$R^3$$
 R^1 $X_1 - R^2$

AΒ The invention features a method for treating an immunoinflammatory disorder by administering I (R1, R2 = H, C1-7 alkyl, C2-7 alkenyl C2-7 alkynyl, C2-6 heterocyclyl, etc.; R3 = H, halo, alkoxy, C1-4 alkyl; X1 = C=O, C=N-NH-R4, etc.; R4 = H, acyl), e.g., ibudilast or KC-764, alone or in combination with a corticosteroid, tetra-substituted pyrimidopyrimidine, or other compound The invention also features pharmaceutical compns. including the combination above for the treatment or prevention of an immunoinflammatory disorder. The combination of ibudilast and prednisolone reduced proinflammatory IL-1 and $\textsc{TNF}\alpha$ secretion by white blood cells stimulated by PMA-ionomycin in vitro. 611227-74-8, DPC 333 ΙT RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (composition further comprising; treatment of immunoinflammatory disorders using pyrazolopyridine compds. in combination with corticosteroids or other agents) RN 611227-74-8 CA 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4- $[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (\alpha R, 3R)-$ (CA INDEX

Absolute stereochemistry.

NAME)

PAGE 2-A

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: (2 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 33 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:451800 CA

Techniques to treat neurological disorders by TITLE:

attenuating the production of proinflammatory

mediators

Shafer, Lisa L. INVENTOR(S):

PATENT ASSIGNEE(S):

Medtronic, Inc., USA
U.S. Pat. Appl. Publ., 21 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050095246	A1	20050505	US 2004-972157	20041022

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AU 2004-283720
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PRIORITY APPLN. INFO.:
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     Methods and devices to attenuate tumor necrosis factor (TNF) and other
AB
     pro-inflammatory mediators in the CNS to treat neurol., neurodegenerative,
     neuropsychiatric disorders, pain and brain injury are described. More
     particularly, TNF-blocking agents that target intracellular signals and
     downstream effects associated with the production and secretion of TNF are
     described. Devices described include therapy delivery devices comprising
     a reservoir capable of housing a TNF-blocking agent and a catheter
     operably coupled to the device and adapted to deliver the TNF-blocking
     agent to a target site within a subject.
     611227-74-8, BMS561392
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (delivery systems for blockers of proinflammatory mediators for
        treatment of neurol. disorders)
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RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

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L6 ANSWER 34 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

142:404248 CA

TITLE:

Tetrasubstituted pyrimidopyrimidines, alone or in combination with other agents, for the treatment of

immunoinflammatory disorders

INVENTOR(S):

Keith, Curtis; Borisy, Alexis; Zimmermann, Grant R.; Jost-Price, Edward Roydon; Manivasakam, Palaniyandi; Hurst, Nicole; Foley, Michael A.; Slavonic, Michael S. Smith Brendan: Auspitz Benjamin A

S.; Smith, Brendan; Auspitz, Benjamin A. Combinatorx, Incorporated, USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 153 pp.

SOURCE:

CODEN: PIXXD2

PE: CODEN: PIXXL

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 7 PATENT INFORMATION:

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PATENT NO.
                         KIND DATE APPLICATION NO.
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     WO 2005037203 A2 20050428 WO 2004-US33656
WO 2005037203 A3 20060316
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EP 2004-809944
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                                                  BR 2004-15397 20041013
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                             A 20070103 CN 2004-80036606
T 20070405 JP 2006-535594
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      US 20050119160 A1 20050602 US 2004-966228 20041015
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A 20060720 MX 2006-4258 20060412
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US 20070010502
PRIORITY APPLN. INFO.:
                                                     WO 2004-US33656
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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The invention discloses a method for treating a patient diagnosed with, or AB at risk of developing, an immunoinflammatory disorder by administering to the patient a tetrasubstituted pyrimidopyrimidine, either alone or in combination with one or more addnl. agents. The invention also features a composition containing a tetra-substituted pyrimidopyrimidine in combination with

one or more addnl. agents.

611227-74-8, DPC 333 ΙT

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pyrimidopyrimidine tetrasubstituted derivs., alone or in combination with other agents, for treatment of immunoinflammatory disorders)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropy1)-3-[4- $[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (\alpha R, 3R)-$ (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

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OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 35 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:388131 CA

TITLE: ADAM33 Enzyme Properties and Substrate Specificity AUTHOR(S): Zou, Jun; Zhang, Rumin; Zhu, Feng; Liu, Jianjun;

Madison, Vincent; Umland, Shelby P.

CORPORATE SOURCE: Schering-Plough Research Institute, Kenilworth, NJ,

07033, USA

SOURCE: Biochemistry (2005), 44(11), 4247-4256

CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB ADAM33 is an asthma susceptibility gene recently identified through a

genetic study of asthmatic families [van Eerdewegh, et al. (2002) Nature 418, 426-430]. To understand the function of the gene product, the recombinant metalloproteinase domain of human ADAM33 was purified and tested for its substrate cleavage specificity using peptides derived from β -amyloid precursor protein (APP). A single Ala substitution at the P2 position of a 10-residue APP peptide, YEVHH*QKLVF, yielded a 20-fold more efficient substrate. Terminal truncation studies identified a minimal nine-residue core (P5-P4') important for ADAM33 recognition and cleavage. Full positional scanning of the 10-mer peptide using the 19 naturally occurring L-amino acids (excluding Cys) revealed a substrate specificity profile. A strong preference for Val or Ile at P3, Ala at P2, and Gln at P1' was observed The substrate binding model based on the X-ray structure of the ADAM33-inhibitor complex supported the observed substrate specificity profile. On the basis of this, an improved substrate was designed and a fluorescence resonance energy transfer (FRET) assay was developed using a fluorogenic derivative of this substrate. Kinetic studies confirmed that the best substrate, FRET-P2 [K(Dabcyl)YRVAF*QKLAE(Edans)K], was .apprx.100-fold more efficient than the wild-type APP peptide substrate, with a kcat/Km value of $(3.6 \pm 0.1) + 104 \text{ s}-1 \text{ M}-1.$ Using this substrate and the FRET assay, ADAM33 enzyme activity and thermal stability were characterized. ADAM33 dependence on buffer conditions, detergents, and temperature was examined, and optimal conditions

were

defined. Accurate Ki values for tissue inhibitors of metalloproteinase and small mol. compds. were obtained.

IT 478911-60-3, IK 682

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibition of ADAM33; substrate specificity of human ADAM33 toward APP-derived peptides permits anal. of ADAM33 activity, stability, and inhibition)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α ,3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3S)- (CA INDEX NAME)

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PAGE 2-A

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 36 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:328858 CA

TITLE: The chimpanzee (Pan troglodytes) as a pharmacokinetic

model for selection of drug candidates: Model

characterization and application

AUTHOR(S): Wong, Harvey; Grossman, Scott J.; Bai, Stephen A.;

Diamond, Sharon; Wright, Matthew R.; Grace, James E., Jr.; Qian, Mingxin; He, Kan; Yeleswaram, Krishnaswamy;

Christ, David D.

CORPORATE SOURCE: Metabolism and Pharmacokinetics, Bristol-Myers Squibb

Company, Wallingford, CT, USA

SOURCE: Drug Metabolism and Disposition (2004), 32(12),

1359-1369

CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER: American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

The chimpanzee (CHP) was evaluated as a pharmacokinetic model for humans AB (HUMs) using propranolol, verapamil, theophylline, and 12 proprietary compds. Species differences were observed in the systemic clearance of theophylline (.apprx.5-fold higher in CHPs), a low clearance compound, and the bioavailability of propranolol and verapamil (lower in CHPs), both high clearance compds. The systemic clearance of propranolol (.apprx.1.53 l/h/kg) suggested that the hepatic blood flow in CHPs is comparable to that in humans. No substantial differences were observed in the in vitro protein binding. A preliminary attempt was made to characterize cytochrome P 450 activities in CHP and HUM liver microsomes. Testosterone 6β -hydroxylation and tolbutamide methylhydroxylation activities were comparable in CHP and HUM liver microsomes. In contrast, dextromethorphan O-demethylation and phenacetin O-deethylation activities were .apprx.10-fold higher (per mg protein) in CHP liver microsomes. Intrinsic clearance ests. in CHP liver microsomes were higher for propranolol (.apprx.10-fold) and theophylline (.apprx.5-fold) and similar for verapamil. Of the 12 proprietary compds., 3 had oral clearances that differed in the two species by more than 3-fold, an acceptable range for biol. variability. Most of the observed differences are consistent with species differences in P 450 enzyme activity. Oral clearances of proprietary compds. in HUMs were significantly correlated to those from CHPs (r = 0.68; p = 0.015), but not to ests. from rat, dog, and monkey. In summary, the chimpanzee serves as a valuable surrogate model for human pharmacokinetics, especially when species differences in P 450 enzyme activity are considered.

IT 611227-74-8, DPC 333

RL: PKT (Pharmacokinetics); BIOL (Biological study) (chimpanzee (Pan troglodytes) as a surrogate model for human pharmacokinetic studies in relation to species differences in P 450 enzyme activity)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

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PAGE 2-A

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 37 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:274008 CA

TITLE: Methods for treating rheumatoid arthritis by

administration of humanized antibody to IP-10 alone or

in combination with additional therapeutic agents

INVENTOR(S): Lane, Thomas E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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US 20050053600
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             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRIORITY APPLN. INFO.:
                                             US 2003-501312P
                                                                P 20030909
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The invention discloses methods and compns. for treating rheumatoid
     arthritis through the administration of humanized anti-IP-10 antibody
     alone or in combination with an addnl. anti-rheumatic therapeutic compound
     Early treatment of type II collagen-induced mouse arthritis models with
     anti-IP-10 monoclonal antibody IP6C7 remarkably diminished paw swelling.
     611227-74-8, DPC-333
ΙT
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (as addnl. agent; humanized antibody to IP-10 alone or in combination
        with addnl. therapeutic agents for treating rheumatoid arthritis)
     611227-74-8 CA
RN
     1-Pyrrolidineacetamide, 3-amino-N-hydroxy-\alpha-(2-methylpropyl)-3-[4-
CN
     [(2-\text{methyl}-4-\text{quinolinyl})\text{methoxy}]\text{phenyl}]-2-\text{oxo-}, (\alpha R, 3R)- (CA INDEX
     NAME)
```

PAGE 2-A

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 2 (2 CITINGS)

ANSWER 38 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:406057 CA

TITLE: Methods and reagents for the treatment of diseases and

disorders associated with increased levels of

proinflammatory cytokines

INVENTOR(S): Jost-Price, Edward Roydon; Manivasakam, Palaniyandi; Smith, Brendan; Fong, Jason; Auspitz, Benjamin A.;

Nichols, M. James; Keith, Curtis; Zimmermann, Grant R.; Brasher, Bradley B.; Sachs, Noah; Chappell, Todd W.

PATENT ASSIGNEE(S): USA

U.S. Pat. Appl. Publ., 37 pp., Cont.-in-part of U.S. Ser. No. 670,488. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT NO.		KIND	DATE	APPLICATION NO.	DATE
US US ZA US AU CA WO	2004022984 2004022015 2005002708 2005015394 2004275777 2538023 2005030132 2005030132	A1 A1 A A1 A1 A1 A2 A3	20041118 20041104 20080227 20050714 20050407 20050407 20050407 20061012	US 2004-777517 US 2003-670488 ZA 2005-2708 US 2004-947455 AU 2004-275777 CA 2004-2538023	20040212 20030924 20030924 20040922 20040923 20040923 20040923	
	CN, C GE, C LK, I NO, N TJ, T RW: BW, C AZ, E EE, E	CO, CR, GH, GM, LR, LS, NZ, OM, IM, TN, GH, GM, BY, KG, ES, FI,	CU, CZ HR, HU LT, LU PG, PH TR, TT KE, LS KZ, MD FR, GB	DE, DK, DE, DK, DE, DK, DE, DT, DE, DT, DE, DT, DE,	BA, BB, BG, BR, BW, BODM, DZ, EC, EE, EG, ESIN, IS, JP, KE, KG, KIMD, MG, MK, MN, MW, MODM, MC, SC, SD, SE, SOUG, US, UZ, VC, VN, YONA, SD, SL, SZ, TZ, UC, TM, AT, BE, BG, CH, COLL, CM, GA, GN, GQ, GO	S, FI, GB, GD, P, KR, KZ, LC, X, MZ, NA, NI, G, SK, SL, SY, U, ZA, ZM, ZW G, ZM, ZW, AM, Y, CZ, DE, DK, L, PT, RO, SE,
		BE, CH,			US 2004-947769 EP 2004-788933 GB, GR, IT, LI, LU, NI CY, AL, TR, BG, CZ, EI	
ZA CN JP SG WO	2004014719 2006002057 1993051 2007517766 146671 2005079284 2005079284	9 7 5	A A	20061121 20070627 20070704 20070705 20081030 20050901 20060323	BR 2004-14719 ZA 2006-2057 CN 2004-80034731 JP 2006-528154 SG 2008-7010	20040923 20040923 20040923 20040923 20040923 20050211
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MX KR	EE, E RO, S MR, N 2006001284 2006003320 2006076319	ES, FI, SE, SI, NE, SN, 4	FR, GB SK, TR	, GR, HU,	IE, IS, IT, LT, LU, MCCF, CG, CI, CM, GA, GI NO 2006-1284 MX 2006-3320 KR 2006-707818	C, NL, PL, PT, N, GQ, GW, ML, 20060321 20060324 20060421
PRIORII	Y APPLN. IN	NFO.:			US 2002-413040P US 2002-417261P US 2002-427424P US 2002-427526P US 2003-464753P US 2003-670488 US 2003-512415P US 2003-520446P US 2004-777517 US 2004-777518	P 20020924 P 20021009 P 20021119 P 20021119 P 20030423 A2 20030924 P 20031015 P 20031113 A1 20040212 A 20040212

RN

US 2004-557496P P 20040330 US 2004-944574 A 20040917 US 2004-947455 A 20040922 WO 2004-US31195 W 20040923

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention features a method for treating a patient diagnosed with, or at risk of developing, an immunoinflammatory disorder by administering an SSRI or analog or metabolite thereof and, optionally, a corticosteroid or other compound to the patient. The invention also features a pharmaceutical composition containing an SSRI or analog or metabolite thereof and a corticosteroid

or other compound for the treatment or prevention of an immunoinflammatory disorder.

IT 611227-74-8, DPC 333

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective serotonin reuptake inhibitors and corticosteroids for treatment of diseases associated with increased proinflammatory cytokines) 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L6 ANSWER 39 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:236648 CA

TITLE: Combination therapy for the treatment of

immunoinflammatory disorders

INVENTOR(S): Jost-Price, Edward Roydon; Brasher, Bradley B.;

Chappel, Todd W.; Manivasakam, Palaniyandi; Sachs,

Noah; Smith, Brendan; Auspitz, Benjamin A.

PATENT ASSIGNEE(S): Combinatorx, Incorporated, USA

SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
WO 2004073614	A2 20040902	WO 2004-US4077	20040212		
WO 2004073614	A3 20041111				
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LK, LR, LS	, LT, LU, LV, MA,	MD, MG, MK, MN, MW, MX,	MZ, NA, NI		
RW: BW, GH, GM	, KE, LS, MW, MZ,	SD, SL, SZ, TZ, UG, ZM,	ZW, AT, BE,		
BG, CH, CY	, CZ, DE, DK, EE,	ES, FI, FR, GB, GR, HU,	IE, IT, LU,		
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US 20050192261	A1 20050901	US 2004-940902	20040914		
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	A2 20050331	WO 2004-US30210	20040915		
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NO, NZ, OM	, PG, PH, PL, PT,	RO, RU, SC, SD, SE, SG,	SK, SL, SY,		

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                                             IN 2008-CH2206
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PRIORITY APPLN. INFO.:
                                             US 2003-447366P
                                                                 P 20030214
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                                             US 2003-503026P
                                                                 Ρ
                                            WO 2004-US4077
                                                                 W 20040212
                                             WO 2004-US30210
                                                                 W 20040915
                                             IN 2005-CN2258
                                                                 A3 20050914
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The invention features a method for treating a patient diagnosed with, or
     at risk of developing, an immunoinflammatory disorder by administering a
     non-steroidal immunophilin-dependent immunosuppressant (NsIDI) and an
     NsIDI enhancer (NsIDIE) or analog or metabolite thereof to the patient.
     The invention also features a pharmaceutical composition containing an NsIDI
and
     NsIDIE or analog or metabolite thereof for the treatment or prevention of
     an immunoinflammatory disorder.
ΙT
     611227-74-8, DPC 333
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (combination therapy for treatment of immunoinflammatory disorders)
RN
     611227-74-8 CA
     1-Pyrrolidineacetamide, 3-amino-N-hydroxy-\alpha-(2-methylpropyl)-3-[4-
CN
     [(2-\text{methyl}-4-\text{quinolinyl})\text{methoxy}]\text{phenyl}]-2-\text{oxo-}, (\alpha R, 3R)- (CA INDEX
     NAME)
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PAGE 1-A

N O

PAGE 2-A

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L6 ANSWER 40 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:230686 CA

TITLE: Pharmaceutical compositions based on anticholinergics

and TACE inhibitors

INVENTOR(S): Meade, Christopher John Montague; Pieper, Michael P.;

Pairet, Michel

PATENT ASSIGNEE(S): Boehringer Ingelheim International GmbH, Germany;

Boehringer Ingelheim Pharma GmbH & Co. Kg

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004071384	A2	20040826	WO 2004-EP1144	20040207

GΙ

AB

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             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
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                                          CA 2004-2515534
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                          Α1
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     EP 1622617
                          A2
                                20060208
                                            EP 2004-709142
                                                                    20040207
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006517216
                          Τ
                                20060720
                                            JP 2006-501774
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     US 20060148839
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                                                                    20050802
PRIORITY APPLN. INFO.:
                                            EP 2003-2986
                                                                    20030211
                                                                 Α
                                            WO 2004-EP1144
                                                                W
                                                                    20040207
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S):
                         MARPAT 141:230686
```

The present invention relates to novel pharmaceutical compns. based on anticholinergics and TACE (TNF alpha converting enzyme) inhibitors, processes for preparing them and their use in the treatment of respiratory diseases. An inhalable powder composition contained tiotropium bromide, a TACE inhibitor such as I, and lactose in capsules. 611227-74-8, BMS-561392 ΙT RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. based on anticholinergics and TACE inhibitors) 611227-74-8 CA RN CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4- $[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (\alpha R, 3R)-$ (CA INDEX NAME)

PAGE 1-A

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PAGE 2-A

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 41 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:218960 CA

TITLE: P2X7 receptor antagonist-TACE inhibitor combination

for the treatment of inflammatory disorders

INVENTOR(S):
Dixon, John

PATENT ASSIGNEE(S): AstraZeneca AB, Swed. SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
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WO 2004	0737	0 4		A1		2004	0902		WO 2	004-	SE19	6		2	0040	216
W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1596847 EP 2004-711525 Α1 20051123 20040216 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK US 20060247257 20061102 US 2005-545972 A1 20050817 PRIORITY APPLN. INFO.: SE 2003-445 20030218 WO 2004-SE196 W 20040216 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 141:218960 OTHER SOURCE(S): The invention provides a pharmaceutical composition, pharmaceutical product, and kit comprising a first active ingredient which is a P2X7 receptor antagonist, and a second active ingredient which is an inhibitor of proTNFlpha convertase enzyme (TACE), for use in the treatment of inflammatory disorders. ΙT 748133-00-8 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (P2X7 receptor antagonist-TACE inhibitor combination for treatment of inflammatory disorders) 748133-00-8 CA RN CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-

[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6

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141:76809 CA
ACCESSION NUMBER:
                                   Anti-inflammatory coatings for implantable medical
TITLE:
                                   devices containing a TACE inhibitor
INVENTOR(S):
                                   Dodd, John H.
PATENT ASSIGNEE(S):
                                   USA
SOURCE:
                                   U.S. Pat. Appl. Publ., 14 pp.
                                   CODEN: USXXCO
DOCUMENT TYPE:
                                   Patent
LANGUAGE:
                                   English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                                          APPLICATION NO.
      PATENT NO. KIND DATE
                                                                                             DATE
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                                 ____
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      US 20040120977 A1 20040624 US 2003-732570 WO 2004060212 A1 20040722 WO 2003-US39312
                                                                                             20031210
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD,
                  TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                              AU 2003-297849 20031210
       AU 2003297849
                                  A1 20040729
                                                              US 2002-434007P P 20021217
US 2003-482273P P 20030625
WO 2003-US39312 W 20031210
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                                  MARPAT 141:76809
       The present invention relates to implantable surgical medical devices
       having coatings comprising one or more compds. that inhibit \text{TNF-}\alpha
       converting enzyme (TACE), more particularly, stents having coatings
       comprising TACE inhibitors. A TACE inhibitor is effective in reducing
       restenosis.
       223402-98-0
ΙT
       RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
       study); USES (Uses)
           (anti-inflammatory coatings for implantable medical devices containing TACE
           inhibitor)
       223402-98-0 CA
RN
       1-Pyrrolidineacetamide, 3-amino-N-hydroxy-\alpha-(2-methylpropy1)-2-oxo-3-
CN
       [4-(2-quinolinylmethoxy)phenyl]-, (\alpha R)- (CA INDEX NAME)
Absolute stereochemistry.
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ANSWER 42 OF 83 CA COPYRIGHT 2009 ACS on STN

ANSWER 43 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 141:65136 CA

Method of using a COX-2 inhibitor and a TACE inhibitor TITLE:

as a combination therapy for the treatment of neoplasia, pain, inflammation, and vaso-occlusive

events

INVENTOR(S): Masferrer, Jaime L.; Stephenson, Diane T.

Pharmacia Corporation, USA PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 143 pp., Cont.-in-part of U.S. Ser. No. 868,063. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 21

PA:	PATENT NO.		KINI)	DATE			APPLICATION NO.					DATE				
	2004 1522 R:	313 AT,		CH,	A1 DE,		2005	0413		EP 2	003- 004- IT,	2657	7		1	9991	222
AU WO	2004 2004 2004 2004	2011 2011 0962	61 61 06	ŕ	A1 B2 A2		2006 2004	0209 1111			004-					0040	
,,,	W:	AE, CN, GE, LK, NO, TJ, BW, BY, ES,	AG, CO, GH, LR, NZ, TM, GH, KG, FI,	AL, CR, GM, LS, OM, TN, GM, KZ,	AM, CU, HR, LT, PG, TR, KE, MD, GB,	AT, CZ, HU, LU, PH, TT, LS, RU, GR,	AU, DE, ID, LV, PL, TZ, MW, TJ, HU,	AZ, DK, IL, MA, PT, UA, MZ, TM, IE,	BA, DM, IN, MD, RO, UG, SD, AT, IT,	DZ, IS, MG, RU, US, SL, BE, LU,	BG, EC, JP, MK, SC, UZ, SZ, BG, MC, GN,	EE, KE, MN, SD, VC, TZ, CH, NL,	EG, KG, MW, SE, VN, UG, CY, PL,	ES, KP, MX, SG, YU, ZM, CZ, PT,	FI, KR, MZ, SK, ZA, ZW, DE, RO,	GB, KZ, NA, SL, ZM, AM, DK, SE,	GD, LC, NI, SY, ZW AZ, EE, SI,
AU PRIORITY	2004 Y APP		78		A1		2004	1007		US 1 US 1 US 2 US 1 AU 2	004- 998- 999- 001- 999- 000-	1137 4709 8680 3852 2593	86P 51 63 14		P 1: B2 1: A2 2: A 1: A3 1:	9991. 0011 9990 9991.	223 222 005 827 222

EP 1999-968939 A3 19991222 US 2003-423526 A 20030425

OTHER SOURCE(S): MARPAT 141:65136

The present invention provides compns. and methods to treat, prevent, or inhibit a neoplasia, a neoplasia-related disorder, pain, inflammation, an inflammatory-related disorder, a vaso-occlusive event or a vaso-occlusive-related disorder in a mammal using a combination of a COX-2 inhibitor and a TACE inhibitor.

223406-21-1 ΤT

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(COX-2 inhibitor-TACE inhibitor combination for treatment of neoplasia, pain, inflammation, and vaso-occlusive events)

223406-21-1 CA RN

1-Pyrrolidineacetamide, 3-[4-[(3,5-dimethylphenyl)methoxy]phenyl]-N-CN hydroxy- α , 3-dimethyl-2-oxo-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 44 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 140:402180 CA

Catalytic Activity of Human ADAM33 TITLE:

Zou, Jun; Zhu, Feng; Liu, Jianjun; Wang, Wenyan; AUTHOR(S):

Zhang, Rumin; Garlisi, Charles G.; Liu, Yan-Hui; Wang, Shihong; Shah, Himanshu; Wan, Yuntao; Umland, Shelby

Department of Allergy, Schering-Plough Research Institute, Kenilworth, NJ, 07033, USA CORPORATE SOURCE:

Journal of Biological Chemistry (2004), 279(11), SOURCE:

9818-9830

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

Biology

DOCUMENT TYPE: Journal LANGUAGE: English

ADAM33 (a disintegrin and metalloproteinase) is an asthma susceptibility

gene recently identified through a genetic study of asthmatic families. To characterize the catalytic properties of ADAM33, the metalloproteinase domain of human ADAM33 was expressed in Drosophila S2 cells and purified. The N-terminal sequence of the purified metalloproteinase was exclusively 204EARR, indicating utilization of one of three furin recognition sites. Of many synthetic peptides tested as potential substrates, four peptides derived from β -amyloid precursor protein (APP), Kit-ligand-1 (KL-1), tumor necrosis factor-related activation-induced cytokine, and insulin B chain were cleaved by ADAM33; mutation at the catalytic site, E346A, inactivated catalytic activity. Cleavage of APP occurred at His14 \downarrow Gln15, not at the α -secretase site and was inefficient $(kcat/Km \ 1.6 + 102 \ M-1 \ s-1)$. Cleavage of a juxtamembrane KL-1peptide occurred at a site used physiol. with a similar efficiency. Mutagenesis of KL-1 peptide substrate indicated that the P3, P2, P1, and P3' residues were critical for activity. In a transfected cell-based sheddase assay, ADAM33 functioned as a neg. regulator of APP shedding and mediated some constitutive shedding of KL-1, which was not regulated by phorbol 12-myristate 13-acetate activation. ADAM33 activity was sensitive to several hydroxamate inhibitors (IK682, Ki = 23 nM) and to tissue inhibitors of metalloproteinase (TIMPs). Activity was inhibited moderately by TIMP-3 and TIMP-4 and weakly inhibited by TIMP-2 but not by TIMP-1, a profile distinct from other ADAMs. The identification of ADAM33 peptide substrates, cellular activity, and a distinct inhibitor profile provide the basis for further functional studies of ADAM33.

IT 478911-60-3, IK 682

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitor; peptide substrate models, cellular activity and inhibitor profile of metalloproteinase ADAM33 of humans)

RN 478911-60-3 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R, 3S)- (CA INDEX NAME)

PAGE 1-A

N O

PAGE 2-A

OS.CITING REF COUNT: 54 THERE ARE 54 CAPLUS RECORDS THAT CITE THIS RECORD (54 CITINGS)

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 45 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 140:287388 CA

TITLE: Preparation of oxopyrrolidinylmethylhydantoins as

inhibitors of TNF- α converting enzyme (TACE).

INVENTOR(S): Burrows, Jeremy Nicholas; Tucker, Howard

PATENT ASSIGNEE(S): Astrazeneca Ab, Swed.; Astrazeneca Uk Limited

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004024721	A1	20040325	WO 2003-GB3914	20030909

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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
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     AU 2003263347
                          Α1
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                                                                   20030909
                                            EP 2003-795075
     EP 1551826
                          Α1
                                20050713
                                                                   20030909
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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                                            US 2005-527215
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PRIORITY APPLN. INFO.:
                                            GB 2002-21246
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                                                                Α
                                            WO 2003-GB3914
                                                                   20030909
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 140:287388

GΙ

AB Title compds. [I; Z = NR8, O, S; m, n = 0, 1; W = CR1R2, bond; V = (substituted) oxopyrrolidinyl; B = (substituted) aryl, heteroaryl, heterocyclyl; R1, R2 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl; R3-R6 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, heterocyclyl; R1R3, R3R4, R3R5, R3R7, R5R6 = atoms to form a 3-7 membered (heterocyclic) (substituted) ring; R7 = H, (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, aryl, heteroaryl, heterocyclyl; R8 = H, Me; R12, R13 = H, alkyl, cycloalkyl], were prepared for treatment of malignancy, reperfusion injury, cardiovascular disease, graft vs. host disease, etc. (no data). Thus, 2-[3-methyl-3-[4-(2-methylquinolin-4-ylmethoxy)phenyl]-2-oxopyrrolidin-1-yl]propionaldehyde (preparation given), (NH4)2CO3, and KCN were refluxed in EtOH to give 5-[1-[3-methyl-3-[4-(2-methylquinolin-4-ylmethoxy)phenyl]-2-oxopyrrolidin-1-yl]ethyl]imidazolidine-2,4-dione.

IT 223406-12-0
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of oxopyrrolidinylmethylhydantoins as inhibitors of $\text{TNF-}\alpha$ converting enzyme (TACE))

RN 223406-12-0 CA

CN 1-Pyrrolidineacetic acid, 3-(4-hydroxyphenyl)- α , 3-dimethyl-2-oxo-, methyl ester, (α R)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 46 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 140:104428 CA

TITLE: Identification of a Selectivity Determinant for

Inhibition of Tumor Necrosis Factor- α Converting

Enzyme by Comparative Modeling

AUTHOR(S): Wasserman, Zelda R.; Duan, James J.-W.; Voss, Matthew

E.; Xue, Chu-Biao; Cherney, Robert J.; Nelson, David

J.; Hardman, Karl D.; Decicco, Carl P.

CORPORATE SOURCE: Structural Biology and Molecular Design Group,

Bristol-Myers Squibb Company, Wilmington, DE, 19880,

USA

SOURCE: Chemistry & Biology (2003), 10(3), 215-223

CODEN: CBOLE2; ISSN: 1074-5521

PUBLISHER: Cell Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Inhibition of tumor necrosis factor— α converting enzyme (TACE) is a widespread objective in the search for disease modifying agents to combat rheumatoid arthritis and other autoimmune diseases. Until recently, most of the inhibitors in the literature have shown concomitant activity against the related matrix metalloproteinases (MMPs), producing undesired side effects. Here we describe the successful search for a TACE selectivity mechanism. We built a homol. model based on the crystal structure of the related snake venom protein atrolysin. Comparison of the model with crystal structures of MMPs suggested a uniquely shaped S1' pocket that might be exploited for selectivity. A novel γ -lactam scaffold was used to explore the activity profile of P1' sidechains, resulting in highly selective compds. consistent with this hypothesis. Transferability of the hypothesis was then demonstrated with five other

distinct scaffolds.

223406-03-9 ΙT

> RL: PAC (Pharmacological activity); BIOL (Biological study) (identification of a selectivity determinant for inhibition of tumor

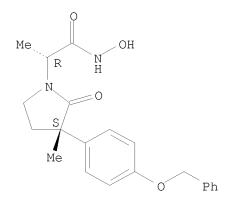
necrosis factor- α converting enzyme by comparative modeling)

223406-03-9 CA RN

1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-2-oxo-3-[4-CN

(phenylmethoxy)phenyl]-, $(\alpha R, 3S)$ - (CA INDEX NAME)

Absolute stereochemistry.



THERE ARE 31 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 31

RECORD (31 CITINGS)

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 35

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 47 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

140:59937 CA

TITLE:

Asymmetric synthesis of aminopyrrolidinones and a

crystalline, free-base aminopyrrolidinone

INVENTOR(S): Campagna, Silvio; Savage, Scott A.; Bordawekar,

Shaliendra; Maduskuie, Thomas P.; Waltermire, Robert

E.; Desikan, Sridhar; Anderson, Stephen R.

PATENT ASSIGNEE(S): Bristol Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Pat.ent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
WO 2004002956	A2 20040108	3 WO 2003-US7920	20030314		
WO 2004002956	A3 20050324	1			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ,	CA, CH, CN,		
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI, GB,	GD, GE, GH,		
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KP, KR, KZ,	LC, LK, LR,		
LS, LT, LU,	LV, MA, MD, MG,	MK, MN, MW, MX, MZ, NI,	NO, NZ, OM,		
PH, PL, PT,	RO, RU, SC, SD,	SE, SG, SK, SL, TJ, TM,	TN, TR, TT,		
TZ, UA, UG,	US, UZ, VC, VN,	YU, ZA, ZM, ZW			
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZM, ZW,	AM, AZ, BY,		

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003269801 A1 20040119 AU 2003-269801 20030314 PRIORITY APPLN. INFO.:

US 2002-392440P P 20020628 US 2002-400411P P 20020801 WO 2003-US7920 W 20030314

OTHER SOURCE(S): MARPAT 140:59937 GI

AB A novel process for the asym. synthesis of aminopyrrolidinones, e.g., crystalline free-base I (Q = 2-methyl-4-quinolinylmethyl), is described. These compds. are useful as intermediates for MMP and TACE inhibitors. Thus, the pyrrolidine ring in I was formed by cyclocondensation of (R)-Me3CO2CNHC(CH2CH:CH2)(CO2Et)C6H4OCH2-Q-p with D-leucine Me ester hydrochloride.

IT 611227-74-8P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(asym. synthesis of aminopyrrolidinones and a crystalline, free-base aminopyrrolidinone) $\,$

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

PAGE 1-A

N O

PAGE 2-A

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 48 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 140:59936 CA

TITLE: Asymmetric synthesis of aminopyrrolidinones and a

crystalline, free-base aminopyrrolidinone

INVENTOR(S): Waltermire, Robert E.; Campagna, Silvio; Savage, Scott

A.; Bordawekar, Shailendra; Maduskuie, Thomas P.;

Desikan, Sridhar; Anderson, Stephen R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp., which

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040006137	A1	20040108	US 2003-389597	20030314

PRIORITY APPLN. INFO.:

US 2002-392440P P 20020628 US 2002-400411P P 20020801

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 140:59936

GΙ

AB A novel process for the asym. synthesis of aminopyrrolidinones, e.g., crystalline free-base I (Q = 2-methyl-4-quinolinylmethyl), is described. These compds. are useful as intermediates for MMP and TACE inhibitors. Thus, the pyrrolidine ring in I was formed by cyclocondensation of (R)-Me3CO2CNHC(CH2CH:CH2)(CO2Et)C6H4OCH2-Q-p with D-leucine Me ester hydrochloride.

IT 611227-74-8P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(asym. synthesis of aminopyrrolidinones and crystalline, free-base aminopyrrolidinone)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

PAGE 1-A

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PAGE 2-A

L6 ANSWER 49 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 140:28052 CA

TITLE: Asymmetric synthesis of aminopyrrolidinones

INVENTOR(S): Waltermire, Robert E.; Savage, Scott A.; Campagna, Silvio; Magnus, Nicholas A.; Confalone, Pasquale N.;

Yates, Matthew; Meloni, David J.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

	PAT	ENT	NO.			KIN:	D	DATE			APPL	ICAT	ION 1	NO.		Di	ATE	
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WO 2003104220				A1	A1 20031218			WO 2003-US7969						20030314				
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			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003218176 Α1 20031222 AU 2003-218176 20030314 US 20030236401 Α1 20031225 US 2003-389528 20030314 US 6770763 В2 20040803 PRIORITY APPLN. INFO.: US 2002-387637P Ρ 20020611 WO 2003-US7969 W 20030314

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 140:28052; MARPAT 140:28052 GI

AB A novel process for the asym. synthesis of an aminopyrrolidinones I [R' is H, (cyclo)alkyl; R'' is a group R' or OH; Rl is substituted Ph or pyridyl; R2 is H, alkyl, Ph, benzyl; R3 is H, Q, (oxa)(aza)alk(en)(yn)ylene-Q, where Q is (un)substituted carbocyclyl; R4 is (oxa)(aza)alk(en)(yn)ylene-H] and corresponding aminoazetidinone, aminopiperidinone, and aminohexahydroazepinone analogs involves amination of corresponding pyrrolidinones or analogs. The products are useful as intermediates for MMP and TACE inhibitors. Thus, pyrrolidinone II was prepared by cyclocondensation of p-PhCH2OC6H4CH(CH2CHO)CO2Me with D-leucine Me ester hydrochloride. Amination of II with 1-chloro-1-nitrosocyclopentane, followed by catalytic hydrogenation in MeOH, mesylation, N-protection with p-tolualdehyde, and reaction with 4-(chlormethyl)-2-methylquinoline (R-Cl) afforded III (isolated as the HCl salt).

IT 634196-86-4P

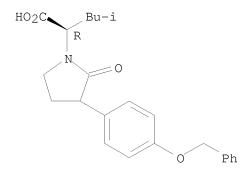
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(asym. synthesis of aminopyrrolidinones by amination of pyrrolidinones)

RN 634196-86-4 CA

CN 1-Pyrrolidineacetic acid, α -(2-methylpropyl)-2-oxo-3-[4-(phenylmethoxy)phenyl]-, (α R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 50 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 140:13040 CA

TITLE: Combined use of TACE inhibitors and COX2 inhibitors as

anti-inflammatory agents

INVENTOR(S):
Duan, Jingwu

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030225054	A1	20031204	US 2003-453036	20030603
PRIORITY APPLN. INFO.:			US 2002-385656P P	20020603

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 140:13040

AB This invention relates to a method of treating inflammatory diseases in a mammal comprising administering to the mammal a therapeutically effective amount of a combination of: (i) at least one TACE inhibitor, (ii) one or more anti-inflammatory agents selected from the group consisting of: selective COX-2 inhibitors, interleukin-1 antagonists, dihydroorotate synthase inhibitors, p38 MAP kinase inhibitors, TNF- α inhibitors, TNF- α sequestration agents, and methotrexate. The invention also relates to compns. and kits containing the same.

IT 223402-98-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combined use of TACE inhibitors and COX2 inhibitors as anti-inflammatory agents)

RN 223402-98-0 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-2-oxo-3-[4-(2-quinolinylmethoxy)phenyl]-, (α R)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L6 ANSWER 51 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 139:390498 CA

TITLE: BMS-561392 (Bristol-Myers Squibb)

AUTHOR(S): Grootveld, Martin; McDermott, Michael F.

CORPORATE SOURCE: Department of Diabetes and Metabolic Medicine,

University of London, London, E1 1BB, UK

SOURCE: Current Opinion in Investigational Drugs (Thomson

Current Drugs) (2003), 4(5), 598-602

CODEN: COIDAZ; ISSN: 1472-4472

PUBLISHER: Thomson Current Drugs
DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review. Bristol-Myers Squibb Pharma Co is developing the tumor necrosis factor- α (TNF α) converting enzyme inhibitor BMS-561392 (DPC-333) for the potential treatment of diseases characterized by overprodn. of TNF α , such as rheumatoid arthritis (RA). A phase IIa trial in RA patients had commenced by Apr. 2001, and by Oct. 2002, BMS-561392 was also under investigation for the potential treatment of inflammatory bowel disease.

IT 611227-74-8, BMS 561392

RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(TNF α converting enzyme inhibitor BMS-561392 for potential treatment of rheumatoid arthritis and inflammatory bowel disease)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

PAGE 1-A

N O

PAGE 2-A

OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 52 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 139:308009 CA

TITLE: Preparation of peptide derivative DPC 333 and its

formulations having unique biopharmaceutical

characteristics

INVENTOR(S): Benedek, Irma H.; Fossler, Michael J.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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20031009
                                            WO 2003-US8404
     WO 2003082287
                                                                    20030314
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            AU 2003-214231
     AU 2003214231
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                                20031013
                                                                    20030314
     US 20030232079
                          Α1
                                20031218
                                             US 2003-389525
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PRIORITY APPLN. INFO.:
                                             US 2002-366944P
                                                                 Ρ
                                                                    20020322
                                             US 2002-400198P
                                                                    20020801
                                                                 Ρ
                                            WO 2003-US8404
                                                                 W
                                                                    20030314
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT GT

AB Peptide derivative I (DPC 333) was prepared by a multistep sequence, which included reactions of D-4-hydroxyphenylglycine and D-leucine Me ester hydrochloride. Oral dosage forms of crystalline DPC 333 are used to inhibit tumor necrosis factor- α convertase (TACE) and to treat inflammatory diseases characterized by TNF α overprodn. A figure shows the mean DPC 333 plasma concentration vs. time curves after administration to subjects in

Τ

a single dose ranging from 15 to 530 mg.

IT 611227-74-8P

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptide derivative DPC 333 and its formulations having unique $\left(\frac{1}{2} \right)$

biopharmaceutical characteristics)

RN 611227-74-8 CA

CN 1-Pyrrolidineacetamide, 3-amino-N-hydroxy- α -(2-methylpropyl)-3-[4-[(2-methyl-4-quinolinyl)methoxy]phenyl]-2-oxo-, (α R,3R)- (CA INDEX NAME)

PAGE 1-A

N O

PAGE 2-A

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 53 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 138:55826 CA

TITLE: Discovery of γ -Lactam Hydroxamic Acids as

Selective Inhibitors of Tumor Necrosis Factor α

Converting Enzyme: Design, Synthesis, and

Structure-Activity Relationships

AUTHOR(S): Duan, James J. W.; Chen, Lihua; Wasserman, Zelda R.; Lu, Zhonghui; Liu, Rui-Qin; Covington, Maryanne B.;

Qian, Mingxin; Hardman, Karl D.; Magolda, Ronald L.; Newton, Robert C.; Christ, David D.; Wexler, Ruth R.;

Decicco, Carl P.

CORPORATE SOURCE: Discovery Chemistry, Experimental Station,

Bristol-Myers Squibb Company, Wilmington, DE,

19880-0500, USA

SOURCE: Journal of Medicinal Chemistry (2002), 45(23),

4954-4957

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:55826

GΙ

AB New γ -lactam TACE inhibitors were designed from known MMP inhibitors. A homol. model of TACE was built and examined to identify the S1' site as the key area for TACE selectivity over MMPs. Rational exploration of the P1'-S1' interactions resulted in the discovery of the 3,5-disubstituted benzyl ether as a TACE-selective P1' group. Further optimization led to the discovery of IK682 (I) as a selective and orally bioavailable TACE inhibitor.

IT 223406-03-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

 $(\gamma$ -lactam hydroxamic acids as selective TACE inhibitors)

RN 223406-03-9 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-2-oxo-3-[4-(phenylmethoxy)phenyl]-, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 68 THERE ARE 68 CAPLUS RECORDS THAT CITE THIS

RECORD (69 CITINGS)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 54 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 137:392728 CA

TITLE: Preparation of novel

N-substituted- γ , γ -trisubstituted lactam

desired and a metal and a large transfer of the large transfer of

derivatives as matrix metalloproteinase inhibitors INVENTOR(S): Duan, Jingwu; DeCicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 119 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6403632	B1	20020611	US 2000-516709	20000301
US 6403632	B1	20020611	US 2000-516709	20000301
PRIORITY APPLN. INFO.:			US 2000-516709	20000301
GI				

$$R^3$$
 R^2 R^1

AB Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3 heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. For instance, 4-benzyloxyphenyl acetate was sequentially alkylated (THF, NaHMDS) with MeI and allyl bromide to afford

ΙI

the α , α -bis(alkylated) derivative which was converted to the aldehyde (CH2C12, O3) and was subsequently reacted with D-alanine Me ester hydrochloride and Zn° in HOAc to yield the lactam ester. This intermediate was treated with hydroxylamine to give hydroxamic acid II. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

ΙT 1121460-73-8

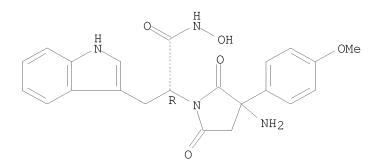
RL: PRPH (Prophetic)

(Preparation of novel N-substituted- γ , γ -trisubstituted lactam derivatives as matrix metalloproteinase inhibitors)

RN 1121460-73-8 CA

1H-Indole-3-propanamide, α -[3-amino-3-(4-methoxyphenyl)-2,5-dioxo-1-CN pyrrolidinyl]-N-hydroxy-, (αR) - (CA INDEX NAME)

Absolute stereochemistry.



THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 9 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 55 OF 83 CA COPYRIGHT 2009 ACS on STN

137:392727 CA ACCESSION NUMBER:

TITLE: Preparation of novel

N-substituted- γ , γ -trisubstituted lactam

derivatives as matrix metalloproteinase inhibitors

INVENTOR(S): Duan, Jingwu; DeCicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 119 pp. CODEN: USXXAM

Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6403632	В1	20020611	US 2000-516709	20000301
US 6403632	B1	20020611	US 2000-516709	20000301
PRIORITY APPLN. INFO.:			US 2000-516709	20000301
GT				

$$R^3$$
 R^2 R^4 R^3 R^2 R^3

AΒ Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. For instance, 4-benzyloxyphenyl acetate was sequentially alkylated (THF, NaHMDS) with MeI and allyl bromide to afford the α , α -bis(alkylated) derivative which was converted to the aldehyde (CH2C12, O3) and was subsequently reacted with D-alanine Me ester hydrochloride and Zn° in HOAc to yield the lactam ester. This intermediate was treated with hydroxylamine to give hydroxamic acid II. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

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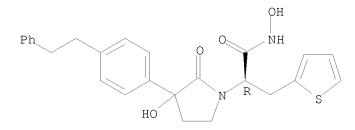
IT 1121391-83-0

RL: PRPH (Prophetic)

(Preparation of novel N-substituted- γ , γ -trisubstituted lactam derivatives as matrix metalloproteinase inhibitors)

RN 1121391-83-0 CA

CN 1-Pyrrolidineacetamide, N,3-dihydroxy-2-oxo-3-[4-(2-phenylethyl)phenyl]- α -(2-thienylmethyl)-, (α R)- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 56 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 137:392726 CA

TITLE: Preparation of novel

N-substituted- γ , γ -trisubstituted lactam

derivatives as matrix metalloproteinase inhibitors

Duan, Jingwu; DeCicco, Carl P.; Wasserman, Zelda R.; INVENTOR(S):

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): USA

U.S., 119 pp. CODEN: USXXAM SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 6403632	В1	20020611	US 2000-516709	20000301		
US 6403632	B1	20020611	US 2000-516709	20000301		
PRIORITY APPLN. INFO.:			US 2000-516709	20000301		
ā						

GΙ

$$R^3$$
 R^2 R^1

AΒ Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. For instance, 4-benzyloxyphenyl acetate was sequentially alkylated (THF, NaHMDS) with MeI and allyl bromide to afford the α , α -bis(alkylated) derivative which was converted to the aldehyde (CH2C12, O3) and was subsequently reacted with D-alanine Me ester hydrochloride and Zn° in HOAc to yield the lactam ester. This intermediate was treated with hydroxylamine to give hydroxamic acid II. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

ΤT

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 57 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 137:33207 CA

TITLE: Preparation of novel

N-substituted- γ , γ -trisubstituted lactam

derivatives as matrix metalloproteinase inhibitors Duan, Jingwu; DeCicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 119 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

INVENTOR(S):

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6403632	B1	20020611	US 2000-516709		20000301
US 6403632	B1	20020611	US 2000-516709		20000301
US 6403632	B1	20020611	US 2000-516709		20000301
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US 6403632	B1	20020611	US 2000-516709		20000301
US 6403632	B1	20020611	US 2000-516709		20000301
US 20030134827	A1	20030717	US 2002-96619		20020312
US 6610731	B2	20030826			
PRIORITY APPLN. INFO.:			US 1997-62418P	P	19971003
			US 1998-165747	А3	19981002
			US 2000-516709		20000301

OTHER SOURCE(S):

MARPAT 137:33207

GΙ

$$R^3$$
 R^2 R^1

Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3 heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. For instance, 4-benzyloxyphenyl acetate was sequentially alkylated (THF, NaHMDS) with MeI and allyl bromide to afford the α, α -bis(alkylated) derivative which was converted to the aldehyde (CH2Cl2, O3) and was subsequently reacted with D-alanine Me ester hydrochloride and Zn° in HOAc to yield the lactam ester. This intermediate was treated with hydroxylamine to give hydroxamic acid II. [This abstract record is one of 6 records for this document necessitated by

ΙI

the large number of index entries required to fully index the document and publication system constraints.]

IT 223401-46-5P, 1-Pyrrolidineacetamide,

N-hydroxy- α , 3-dimethyl-2-oxo-3-[4-(phenylmethoxy)phenyl]-, (α R, 3R)-

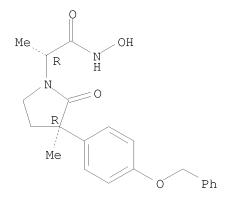
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $(N-\gamma,\gamma-\text{trisubstituted lactam derivs.}$ as MMP-3/aggrecanase inhibitors)

RN 223401-46-5 CA

CN 1-Pyrrolidineacetamide, N-hydroxy- α , 3-dimethyl-2-oxo-3-[4-(phenylmethoxy)phenyl]-, (α R, 3R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 58 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 135:180952 CA

TITLE: Preparation of matrix metalloproteinase inhibitors
INVENTOR(S): Decicco, Carl P.; Nelson, David J.; Barrett, John A.;
Carpenter, Alan P., Jr.; Duran, James J.; Rajopadhye,

Milind

PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 179 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001060820	A2	20010823	WO 2001-US4848	20010215
WO 2001060820 W: AU, BR,	A3 CA, CN, CZ	20020221 Z, EE, HU,	IL, IN, JP, KR, LT, LV	7, MX, NO, NZ,
PL, RO, TJ, TM	SG, SI, SK	TR, UA,	VN, ZA, AM, AZ, BY, KO	G, KZ, MD, RU,

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR US 20050025702 20050203 US 2001-783248 20010214 Α1 US 6989139 В2 20060124 CA 2395841 Α1 20010823 CA 2001-2395841 20010215 AU 2001041498 Α 20010827 AU 2001-41498 20010215 EP 1257549 Α2 20021120 EP 2001-912751 20010215 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR EP 1772452 Α2 20070411 EP 2006-76915 20010215 EP 1772452 А3 20070704 R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR PRIORITY APPLN. INFO.: US 2000-182627P 20000215 Р EP 2001-912751 A3 20010215 WO 2001-US4848 W 20010215 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 135:180952
GI

Compds. Qd-Ln-Ch (Qd is 1-10 targeting moieties; Ln is a linking group; Ch is a chelator) were prepared The chelator is able to conjugate a cytotoxic radioisotope. The targeting moiety, e.g., R1NHCOCR2R3NR4R5 [R1 = OH or Ph, which is optionally substituted with a bond to the linking group or to the chelator, provided when R1 = Ph, R3 = 2-[(1-carboxyethyl)amino]alkanoyl; R2, R3, R4, R5 = H, C1-6, which is alkyl optionally substituted with a bond to the linking group or to the chelator; R2R3C or R4R5N may form a ring], is a matrix metalloproteinase inhibitor. Thus, peptidomimetic I was prepared by coupling reactions of (3-aminopropyl)carbamic acid tert-Bu ester with oxaazabicyclo[10.2.2]hexadecatrienecarboxylic acid derivs. Compds. of the invention were found to be active in matrix metalloproteinase inhibitory assays.

IT 1098518-70-7

RL: PRPH (Prophetic)

(Preparation of matrix metalloproteinase inhibitors)

RN 1098518-70-7 CA

CN 1-Pyrrolidineacetic acid, α -[4-[[(1,1-

dimethylethoxy)carbonyl]amino]butyl]-3-(4-hydroxyphenyl)-3-methyl-2-oxo-, methyl ester, (α R, 3S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 59 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 135:180950 CA

TITLE: Preparation of matrix metalloproteinase inhibitors as

diagnostic agents

INVENTOR(S): Carpenter, Alan P., Jr.; Rajopadhye, Milind

PATENT ASSIGNEE(S): DuPont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 205 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA.	TENT	NO.			KIN	D i	DATE			APPL	ICAT	ION 1	NO.		D.	ATE		
	2001						20010823			WO 2001-US4870				20010215				
WO	2001				A3		2002											
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		PL,	RO,	SG,	SI,	SK,	UA,	VN,	ZA,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	
		PT,	SE,	TR														
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ΑU	2001	0383	19		A	20010827				AU 2001-38319				20010215				
EP	1255	570			A2		2002	1113		EP 2	001-	9107	45		2	0010	215	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	FΙ,	CY,	TR													
BR	2001	0083	04		Α		2003	0318		BR 2	001-	8304			2	0010	215	
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CN	1450	915			Α		2003	1022		CN 2	001-	8050	12		2	0010	215	

CN 1254276	С	20060503				
AU 2001238319	В2	20060406	AU	2001-238319		20010215
CN 1853732	A	20061101	CN	2006-10058825		20010215
NZ 521246	A	20061222	NZ	2001-521246		20010215
IN 2002MN00889	A	20050304	IN	2002-MN889		20020702
IN 2002MN00994	A	20050304	IN	2002-MN994		20020723
MX 2002007874	A	20021031	MX	2002-7874		20020814
US 20050047999	A1	20050303	US	2003-645272		20030821
US 7060248	В2	20060613				
HK 1060047	A1	20061222	HK	2004-102867		20040422
US 20050287074	A1	20051229	US	2005-194845		20050801
PRIORITY APPLN. INFO.:			US	2000-182712P	Р	20000215
			US	2001-783249	A1	20010214
			CN	2001-805012	А3	20010215
			WO	2001-US4870	W	20010215
			US	2003-645272	A1	20030821

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 135:180950
GI

Diagnostic agents comprising a diagnostic metal or an echogenic gas and compds. Qd-Ln-R (Qd is 1-10 targeting moieties; Ln is a linking group; R is a chelator or a surfactant) were prepared. The chelator is able to conjugate the diagnostic metal. The surfactant is capable of forming an echogenic gas filled lipid sphere or microbubble. The targeting moiety, e.g., R1NHCOCR2R3NR4R5 [R1 = OH or Ph, which is optionally substituted with a bond to the linking group or to the chelator, provided when R1 = Ph, R3 = 2-[(1-carboxyethyl)amino]alkanoyl; R2, R3, R4, R5 = H, C1-6, which is alkyl optionally substituted with a bond to the linking group or to the chelator; R2R3C or R4R5N may form a ring], is a matrix metalloproteinase inhibitor. Thus, peptidomimetic I was prepared by coupling reactions of (3-aminopropyl)carbamic acid tert-Bu ester with oxaazabicyclo[10.2.2]hexadecatrienecarboxylic acid derivs. Compds. of the invention were found to be active in matrix metalloproteinase inhibitory

assays.

IT 1098518-70-7

RL: PRPH (Prophetic)

(Preparation of matrix metalloproteinase inhibitors as diagnostic

agents)

RN 1098518-70-7 CA

CN 1-Pyrrolidineacetic acid, α -[4-[[(1,1-

dimethylethoxy)carbonyl]amino]butyl]-3-(4-hydroxyphenyl)-3-methyl-2-oxo-, methyl ester, (α R,3S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 60 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 135:19548 CA

TITLE: Preparation of N-substituted 3-pyrrolin-2-ones, their

use as herbicides, and control of paddy weeds

INVENTOR(S): Fusaka, Takafumi; Tanaka, Yasushi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 59 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001151751	A	20010605	JP 1999-333416	19991124
PRIORITY APPLN. INFO.:			JP 1999-333416	19991124
OTHER SOURCE(S).	MARDAT	135.195/18		

OTHER SOURCE(S): MARPAT 135:19548

GI

$$R1$$
 $R1$
 $R2$
 $R3$
 $C-R4$
 $Z-CH2$
 I

AB The compds. I [R1 = (un)substituted hydrocarbyl, (un)substituted heterocyclyl; R2, R3 = H, (un)substituted hydrocarbyl; R2 and R3 may be bonded together to form a 3-8-membered hydrocarbon ring; R4 = (un)substituted aryl, (un)substituted heterocyclyl, CONR5R6; R5, R6 = H, (un)substituted hydrocarbyl, (un)substituted heterocyclyl; Z = OH, W1R7, OCOR8; W1 = O, SO, SO2; R7, R8 = (un)substituted hydrocarbyl] and their salts are useful as herbicides especially for paddy. I are prepared by cyclizing

R1CH2CON(CR3R4R5)CH2COCH2Z1 (Z1 = OR7, SR7) or their salts and optionally treating the product with oxidizing agents for oxidation of S. The other methods for the preparation of I are also claimed. PhCH2COC1 was added dropwise to a mixture of 1-[1-(3,5-dichlorophenyl)-1-methylethylamino]-3-methoxy-2-propanone (preparation given), K2CO3, and acetone at 0° over 30 min and the reaction mixture was further stirred at room temperature overnight.

The reaction mixture was further treated with K2CO3 and PhCH2COC1 at room temperature for 3 h to give N-[1-(3,5-dichlorophenyl)-1-methylethyl]-N-(3-methoxy-2-oxopropyl)phenylacetamide. This was treated with an EtOH solution of KOH at room temperature for 30 min and at 60° for 30 min to give 1-[1-(3,5-dichlorophenyl)-1-methylethyl]-4-methoxymethyl-3-phenyl-3-pyrrolin-2-one (II). Herbicidal effect of II against Echinochloa oryzicola, Cyperus difformis, etc. was shown. Agrochem. formulations containing I were also given.

IT 342792-64-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-substituted 3-pyrrolin-2-ones as herbicides for paddy) 342792-64-7 CA

RN 342792-64-7 CA
CN 3-Pyrrolidinecarboxylic acid, 1-[2-[(2,5-dichlorophenyl)amino]-1,1-dimethyl-2-oxoethyl]-4-formyl-2-oxo-3-phenyl-, methyl ester (CA INDEX NAME)

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD OS.CITING REF COUNT: 1 (1 CITINGS)

ANSWER 61 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 132:180476 CA

TITLE: Preparation of cyclic amide compounds as herbicides INVENTOR(S): Fusaka, Takafumi; Tanaka, Yasushi; Kadowaki, Atsushi

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 370 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	PATENT NO.				KIN	KIND DATE APPLICATION NO.						DATE					
WO	2000	0094	 81		A1	_	2000	0224		WO 1	 1999-	 JP43	 27		1	 9990	810
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		EE,	GD,	GE,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KG,	KR,	KΖ,	LC,	LK,	LR,
		LT,	LV,	MD,	MG,	MK,	MN,	MX,	NO,	NZ,	, PL,	RO,	RU,	SG,	SI,	SK,	SL,
		ТJ,	TM,	TR,	TT,	UA,	US,	UΖ,	VN,	YU,	, ZA						
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	, ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,
		ES,	FΙ,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	, NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,
		CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	, TD,	ΤG					
AU	9951	959			Α		2000	0306		AU 1	1999-	5195	9		1	9990	810
JP	2000	1192	50		A		2000	0425		JP 1	1999-	2265	35		1	CY, DE, DK, BJ, CF, CG, 19990810 19990810 19980811	
PRIORIT	PRIORITY APPLN. INFO.:			.:						JP 1	1998-	2274	31		A 1	9980	811
										WO 1	1999-	JP43	27	,	W 1	9990	810
OTHER SO	THER SOURCE(S):				MAR	PAT	132:	1804	76								

GΙ

$$\begin{array}{c|c}
R^2 \\
R^3 \\
R^4 \\
Z
\end{array}$$

AB Cyclic amide compds. having two substituents at the α -position of the carbonyl group [I; R1 = (un)substituted hydrocarbyl, heterocyclyl, or CONH2; R2, R3 = (un)substituted hydrocarbyl or CR2R3 = 3- or 8-membered cyclic hydrocarbon ring; R4 = W1-R7; W1 = O optionally oxidized S; R7 =(un) substituted hydrocarbyl or heterocyclyl; A = (un) substituted CH:CH, CH:CHCH2, C(:CH2)CH2, or C(:CH2)CH2CH2; Z = halo, cyano, (un)substitutedhydrocarbyl, acyl, or CONH2] or salts thereof are prepared These compds. exert an excellent herbicidal effect on weeds over a broad range (for example, lowland weeds and upland weeds) at a low dosage and yet cause little chemical injury on cultivated plants such as rice, wheat, barley, soybean, corn and cotton, thereby achieving an excellent selective herbicidal effect. This selective herbicidal effect is sustained over a long time. Moreover, these compds. are little toxic to mammals, fish and shellfish and induce no environmental pollution. Thus, they can be highly safely used as herbicides for lowlands, uplands, orchards or non-crop lands. Thus, a solution of Me 1-(1-(3,5-dichlorophenyl)-1-methylethyl)-4hydroxy-4-methyl-2-oxo-3-phenylpyrrolidine-3-carboxylate (preparation given) and pyridine in ClCH2CH2Cl was stirred under ice-cooling, treated dropwise with SOC12 at $3-4^{\circ}$ over 6 min, and stirred at $2-4^{\circ}$ under ice-cooling for 1.5 h and at room temperature for 0.5 h to give $\mbox{\rm Me}$ 1-(1-(3,5-dichloropheny1)-1-methylethyl)-1,3-dihydro-4-methyl-2-oxo-3phenyl-2H-pyrrole-3-carboxylate (II). II at 10 g/are post emergence controlled Echinochloa crus-galli, Cyperus difformis, and Rotala indica by 100%.

ΙT 259246-78-1P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of cyclic amide compds. as herbicides)

RN 259246-78-1 CA

CN 3-Pyrrolidinecarboxylic acid, 1-[2-[(2,5-dichlorophenyl)amino]-1,1dimethyl-2-oxoethyl]-4-methylene-2-oxo-3-phenyl-, methyl ester (CA INDEX NAME)

10/585420

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 62 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 130:360818 CA

TITLE: Preparation of novel lactam as metalloprotease

inhibitors

INVENTOR(S): Duan, Jinguw; Decicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 333 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

PA	PATENT NO.			KIN	D	DATE		APPLICATION NO. DATE WO 1998-XC21037 199810 IL, JP, KR, LT, LV, MX, NO, NZ, AZ, BY, KG, KZ, MD, RU, TJ, TM FI, FR, GB, GR, IE, IT, LU, MC, WO 1998-US21037 199810 IL, JP, KR, LT, LV, MX, NO, NZ,									
WO	9918	 074			A1	_	 1999	0415		WO 1	 998-:	 XC21	 037		1	 9981	002
	W:	ΑU,	BR,	CA,	CN,	CZ,	EE,	HU,	IL,	JP,	KR,	LT,	LV,	MX,	NO,	NZ,	PL,
		RO,	SG,	SI,	SK,	UA,	VN,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM	
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
		PT,	SE														
WO	9918	074			A1		1999	0415	,	WO 1	998-	US21	037		1	9981	002
	W:	ΑU,	BR,	CA,	CN,	CZ,	EE,	HU,	IL,	JP,	KR,	LT,	LV,	MX,	NO,	NZ,	PL,
		RO,	SG,	SI,	SK,	UA,	VN,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM	
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
		PT,	SE														
PRIORIT	Y APP	LN.	INFO	.:						US 1	997-	6241	8P		P 1	9971	003
									,	WO 1	998-	US21	037		1	9981	002
GI																	

$$R^{3}$$
 R^{2} R^{2} R^{1}

AB Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3 heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. Thus, compound II was prepared via alkylation, oxidation, amination, and cyclization. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

RL: PRPH (Prophetic)

(Preparation of novel lactam as metalloprotease inhibitors)

RN 1121460-73-8 CA

CN 1H-Indole-3-propanamide, α -[3-amino-3-(4-methoxyphenyl)-2,5-dioxo-1-pyrrolidinyl]-N-hydroxy-, (α R)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 63 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 130:360817 CA

TITLE: Preparation of novel lactam as metalloprotease

inhibitors

INVENTOR(S): Duan, Jinguw; Decicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 333 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

PA:	PATENT NO.		KIN	D	DATE			APPL	ICAT	ION 1	NO.		DATE				
WO	9918	074			A1 19990415			,	WO 1	 998-:	 XB21	 037		1:	 9981	002	
	W:	ΑU,	BR,				EE,	HU,	IL,	JP,	KR,	LT,	LV,	MX,	NO,	NZ,	PL,
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	RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
		PT,	SE														
WO	9918	074			A1		1999	0415	,	WO 1	998-	US21	037		1:	9981	002
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		RO,	SG,	SI,	SK,	UA,	VN,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM	
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
		PT,	SE														
PRIORIT	Y APP	LN.	INFO	.:						US 1	997-	6241	8P]	P 1	9971	003

GΙ

$$R^{3}$$
 N R^{2} R^{1}

Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3 heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. Thus, compound II was prepared via alkylation, oxidation, amination, and cyclization. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

RL: PRPH (Prophetic)

(Preparation of novel lactam as metalloprotease inhibitors)

RN 1121391-83-0 CA

CN 1-Pyrrolidineacetamide, N,3-dihydroxy-2-oxo-3-[4-(2-phenylethyl)phenyl]- α -(2-thienylmethyl)-, (α R)- (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 64 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 130:360816 CA

TITLE: Preparation of novel lactam as metalloprotease

inhibitors

INVENTOR(S): Duan, Jinguw; Decicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

Du Pont Pharmaceuticals Company, USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 333 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

	PATENT NO.				KIND DATE				APPLICATION NO.					DATE				
	WO	9918	074			A1	_	1999	0415		WO 1	 998-:	 XA21	 037		1:	 9981	002
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			RO,	SG,	SI,	SK,	UA,	VN,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM	
		RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,
			PT,	SE														
	WO	9918	074			A1		1999	0415		WO 1	998-	US21	037		1:	9981	002
		W:	ΑU,	BR,	CA,	CN,	CZ,	EE,	HU,	IL,	JP,	KR,	LT,	LV,	MX,	NO,	NΖ,	PL,
			RO,	SG,	SI,	SK,	UA,	VN,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM	
		RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
			PT,	SE														
PRIOR	YTI	APP	LN.	INFO	.:						US 1	997-	6241	8P		P 1	9971	003
										WO 1	998-	US21	037		19981002			
_																		

GΙ

$$\begin{array}{c|c}
R^3 & O & R^2 \\
R^4 & N & R^1
\end{array}$$

Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, AB PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3 heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. Thus, compound II was prepared via alkylation, oxidation, amination, and cyclization. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.] THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 3 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 65 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 130:296611 CA

TITLE: Preparation of novel lactam as metalloprotease

inhibitors

INVENTOR(S): Duan, Jinguw; Decicco, Carl P.; Wasserman, Zelda R.;

Maduskuie, Thomas P., Jr.

PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 333 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

PAT	CENT :	NO.			KINI)	DATE			APPL		ION :			D	ATE	
WO	9918	 074			A1	_	1999	0415		WO 1					1:	 9981	002
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		PT,	SE														
ZA	9808	967			Α		2000	0403		ZA 1	998-	8967			1	9981	001
CA	2305	679			A1		1999	0415		CA 1	998-	2305	679		1	9981	002
WO	9918	074			A1		1999	0415		WO 1	998-	XA21	037		1:	9981	002
	W:	ΑU,	BR,	CA,	CN,	CZ,	EE,	HU,	IL,	JP,	KR,	LT,	LV,	MX,	NO,	NZ,	PL,
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		PT,	SE														
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		PT,	SE														
WO	9918	074			A1		1999	0415		WO 1	998-	XD21	037		1	9981	002
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		RO,	SG,	SI,	SK,	UA,	VN,	AM,	AΖ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM	
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,

		PT,	SE															
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			SE															
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	7472						2002											
	6057						2000										9981	
	1027						2000			EΡ	19	998-	9509.	54		1	9981	002
EP	1027																	
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		,	LT,	,	,													
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	2000						2001										9981	
	2001						2001			HU	20	001-	186			1	9981	002
	2001						2002											
JP	2001	.5193.	31		Т		2001							86			9981	
AT	2678	805			Τ		2004							54			9981	
PT	1027	332			E		2004				_			54			9981	
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PRIORIT	y apf	LN.	INFO	.:										8P			9971	
														037			9981	002

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 130:296611

GΙ

$$\begin{array}{c|c}
R^3 & O & R^2 \\
R^4 & N & R^1 \\
A & & & \\
\end{array}$$

AB Title compds. [I; A is selected from COOH, CH2COOH, CONHOH, SH, CH2SH, PO(OH)2, etc.; ring B is a 4-8 membered cyclic amide containing 0-3 heteroatoms from O, N, and S, etc.; R1 is phenylmethoxyphenyl, phenoxyphenyl, etc.; R2 is H, CH3, Et, i-Pr, etc.; R1-R2 combine to form heterocyclic; R3 is H, alkylene, heterocyclic, etc.; R4 is H, alkylene, etc.; R3-R4 combine to form heterocyclic], stereoisomer, and pharmaceutically acceptable salt thereof are prepared as useful metalloprotease inhibitors. Thus, compound II was prepared via alkylation, oxidation, amination, and cyclization. [This abstract record is one of 6 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

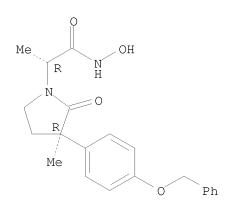
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel lactam metalloprotease inhibitors)

RN 223401-46-5 CA

CN 1-Pyrrolidineacetamide, N-hydroxy-α,3-dimethyl-2-oxo-3-[4-(phenylmethoxy)phenyl]-, (αR,3R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS

RECORD (13 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 66 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 119:97095 CA ORIGINAL REFERENCE NO.: 119:17529a,17532a

TITLE: Colored polyester compositions

INVENTOR(S): Weaver, Max A.; Coates, Clarence A.; Parham, William

W.; Hilbert, Samuel D.; Krutak, James J.; Pruett,

Wayne P.

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: U.S., 34 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	ATENT NO.	KIND DATE	APPLICATION N	O. Di	ATE
PRIORITASSIGNMAB THE COMMENT OF THE COMME	ne compns. have the colorants comprising eg. substituted 2, preferably 2) poly	nermally stable ng ≥1 electron- ,5-dioxypyrrol: yester-reactive lends with othe ion)		1 19 2 A3 19 Y FORMAT therein, y attached ontaining ≥ ants are use	to a 1 ed for
CN 1,	4-Benzenedicarbo	ylphenylamino)	methyl ester, polyme phenyl]-2,5-dioxo-1-		
CN	4 1				
	RN 166164-22-3 MF C20 H17 N3 O4				
NC NC	H ₂ -CO ₂ H 0 N-Me				
CI	4 2				
CN	RN 30965-26-5 MF (C10 H10 O4 . CI PMS	C4 H10 O2)x			
	CM 3				
	CRN 120-61-6 CMF C10 H10 (04			

CM 4

CRN 110-63-4 CMF C4 H10 O2

 $HO-(CH_2)_4-OH$

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 67 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 117:79880 CA
ORIGINAL REFERENCE NO.: 117:13791a,13794a

TITLE: Data-retainable photographic film product and process

for producing color print

INVENTOR(S): Ikenoue, Shinpei; Shibahara, Yoshihiko; Watanabe,

Toshiyuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 114 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 476327	A1	19920325	EP 1991-113902	19910820
EP 476327	B1	19991117		
R: DE, FR, GB,	IT, NL			
JP 04100036	A	19920402	JP 1990-218712	19900820
JP 04149543	A	19920522	JP 1990-274797	19901012
JP 04166932	A	19920612	JP 1990-294729	19901031
PRIORITY APPLN. INFO.:			JP 1990-218712	A 19900820
			JP 1990-274797	A 19901012
			JP 1990-294729	A 19901031

AB Color photog. film comprises a cartridge, a spool carried in the cartridge for rotation about a longitudinal axis of the spool; and a silver halide photosensitive film for color photog. that is wound into a roll around the spool and that comprises at least one red-sensitive silver halide emulsion layer, at least one green-sensitive silver halide emulsion layer and at least one blue-sensitive silver halide emulsion layer formed on a support.

The photog. film has an information-recording part, and contains a compound capable of reacting with an oxidate of a developing agent to release a diffusing development inhibitor or its precursor and/or a compound capable of reacting with an oxidate of a developing agent to form a cleaved compound capable of reacting with another mol. of the oxidate of the color developing agent to cleave a development inhibitor. At least one of the silver halide emulsion layers contains at least one kind of photosensitive silver halide grains having a high silver iodide phase therein. The film form color prints having excellent sharpness and color reproducibility. The information-recording part has ≥ 1 means selected from the group consisting of an optical memory means, an elec. memory means, and a magnetic memory means. The film has 200 mm2 to 1,200 mm2 of area of 1 frame to be image exposed and the information-recording part is 15-60% of this area.

IT 142554-24-3

RL: USES (Uses)

(photog. color film with information-recording part and image forming part containing)

RN 142554-24-3 CA

CN Benzoic acid, 4-chloro-3-[[2-[2,5-dioxo-3-phenyl-4-(phenylmethyl)-1-pyrrolidinyl]-4,4-dimethyl-1,3-dioxopentyl]amino]-,
1-[(dodecyloxy)carbonyl]pentyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 68 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 100:156456 CA ORIGINAL REFERENCE NO.: 100:23831a,23834a

TITLE: Amnesia-reversal activity of a series of

N-[(disubstituted-amino)alkyl]-2-oxo-1-

pyrrolidineacetamides, including pramiracetam

AUTHOR(S): Butler, Donald E.; Nordin, Ivan C.; L'Italien, Yvon

J.; Zweisler, Lynette; Poschel, Paul H.; Marriott,

John G.

CORPORATE SOURCE: Chem. Dep., Warner-Lambert/Parke-Davis Pharm. Res.,

Ann Arbor, MI, 48105, USA

10/585420

SOURCE: Journal of Medicinal Chemistry (1984), 27(5), 684-91

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ

O NCH₂CONHCH₂CH₂N(CHMe₂)₂

As series of 42 title compds. was prepared They reversed electroconvulsive shock induced amnesia in mice when administered subsequent to the electroshock treatment and were inactive in a general observational test for central nervous system activity. Active compds. exhibited an inverted U-shaped dose-response curve. Among the compds. with the broadest dose-response curve as well as the most potent, were the N-CH2CH2N(CHMe2)2 and 2,6-dimethylpiperidino derivs. The N-(dialkylamino)alkyl substituent markedly enhances amnesia-reversal activity, with CH2CH2 providing the optimal chain length. I was selected for preclin. toxicol. evaluation, assigned the investigational number CI-879 and the U.S. Adopted name pramiracetam. I demonstrated a wide margin of safety in animals and was well tolerated in normal human volunteers. It has shown encouraging activity in an open label trial in patients with primary degenerative dementia (or senile dementia of the Alzheimer's type).

IT 88981-96-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and amidation of)

RN 88981-96-8 CA

CN 1-Pyrrolidineacetic acid, 2-oxo-3-phenyl-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L6 ANSWER 69 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 93:177194 CA
ORIGINAL REFERENCE NO.: 93:28092h,28093a

TITLE: Silver halide color photographic materials

INVENTOR(S): Fujiwara, Mitsuto; Endo, Takaya; Sugita, Hiroshi;

Kojima, Tamotsu; Usui, Tsugimiki

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55033102	A	19800308	JP 1978-42379	19780411
PRIORITY APPLN. INFO.:			JP 1978-42379	19780411

GI For diagram(s), see printed CA Issue.

AΒ Ag halide color photog. materials contain (1) a 2-equivalent coupler and a development inhibitor-releasing coupler of the formula I and/or II (Z =group of atoms required to form heterocyclic or C ring; R = triazole or mercapto compound type development inhibitor moiety which is bonded with the C atom via N or S atom; R1 = H, halo; R2 = halo, heterocyclic moiety; R3 = alkyl, aryl) in one of the Ag halide emulsion layers, and (2) a 5- or 6-membered heterocyclic compound with -NH- and -CO- group within the ring in the same Aq halide emulsion layer or its adjacent layer. Thus, a color photog. film having (1) red-sensitive emulsion layer containing cyan coupler III, development inhibitor-releasing coupler IV, and stabilizer V, (2) a green-sensitive emulsion layer containing 1-(2,4,6-trichlorophenyl)-3-[3-[(2,4-di-tertamylphenoxy)acetamido]benzamido]-5-pyrazolone (magenta coupler) and 1-(2,4,6-trichlorophenyl)-3-(2-chloro-5-octadecenylsuccinimidoanilino)-4-(4-hydroxyphenylazo)-5-pyrazolone (a colored coupler), and a (3) a blue-sensitive emulsion layer containing a yellow coupler VI was prepared The film was sensitometrically exposed and developed to give relative sensitivity, fog, and Dmax (cyan) of 204, 0.12, and 2.32, resp. The

sensitivity, fog, and Dmax values did not change significantly even when

the film was aging treated. IT 75237-46-6

RL: TEM (Technical or engineered material use); USES (Uses) (photog. coupler, stabilizers for)

RN 75237-46-6 CA

CN 1-Pyrrolidineacetamide, N-[5-[[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]-2-chlorophenyl]- α -(2,2-dimethyl-1-oxopropyl)-3-methyl-2,5-dioxo-4-phenyl- (CA INDEX NAME)

L6 ANSWER 70 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 93:16904 CA ORIGINAL REFERENCE NO.: 93:2771a,2774a

TITLE: Silver halide color photographic materials

INVENTOR(S): Arai, Atsuaki; Ooishi, Kiyoshi; Okumura, Akio; Nakajo,

Kyoshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55000598	A	19800105	JP 1979-70853	19790606
JP 58010739	В	19830226		
PRIORITY APPLN. INFO.:			JP 1979-70853	19790606
GT				

Ι

AB Ag halide color photog. materials contain acetamide derivs. having acylamino and aliphatic acyl groups on the α C atom as the yellow couplers. The couplers exhibit excellent coupling reactivity. Thus, a yellow coupler I 27 g was added to a Ag(Br,I) emulsion containing 54 g Ag halide, and the emulsion was coated on a film support. The resultant photog. film was sensitometrically exposed and developed to give λ max, fog, relative sensitivity, γ , and Dmax of 449 nm, 0.20, 100, 2.23, and 3.06, resp., vs. 449 nm, 0.11, 95, 0.65, and 1.87 for a control with α -pivaly1-2-chloro-5-[α -(2,4-di-tert-amylphenoxy)butyramido]acetanilide instead of I.

IT 41435-03-4

RL: TEM (Technical or engineered material use); USES (Uses) (photog. yellow coupler)

RN 41435-03-4 CA

CN 1-Pyrrolidineacetamide, N-[5-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]acetyl]amino]-2-chlorophenyl]- α -(cyclohexylcarbonyl)-2,5-dioxo-3-phenyl- (CA INDEX NAME)

L6 ANSWER 71 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 92:76284 CA
ORIGINAL REFERENCE NO.: 92:12563a,12566a

TITLE: Lactam-N-acetic acids and their amides INVENTOR(S): Rodriguez, Ludovic; Marchal, Lucien

PATENT ASSIGNEE(S): UCB S. A., Belg.
SOURCE: Ger. Offen., 38 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 2918523	A1	19791115	DE 1979-2918523	19790508
EP 5689	A1	19791128	EP 1979-870012	19790502
EP 5689	B1	19810318		
R: AT, BE,	CH, DE, E	FR, GB, IT,	LU, NL, SE	
AT 27	T	19810415	AT 1979-870012	19790502
DK 7901823	A	19791109	DK 1979-1823	19790503
DK 150064	В	19861201		
DK 150064	С	19870615		
FI 7901421	A	19791109	FI 1979-1421	19790503
FI 66602	В	19840731		
FI 66602	С	19841112		
NO 7901477	A	19791109	NO 1979-1477	19790503
NO 150639	В	19840813		
NO 150639	С	19841121		
SE 7903864	A	19791109		19790503
NL 7903536	A	19791112	NL 1979-3536	19790504
BE 876067	A1	19791107	BE 1979-9378	19790507
AU 7946816	A	19791115	AU 1979-46816	19790507
AU 522815	В2	19820624		
FR 2425433	A1	19791207	FR 1979-11537	19790507
ZA 7902175	А	19800528		19790507
US 4221789	А	19800909		19790507
PL 117056	В1	19810731	PL 1979-215420	19790507
CA 1119593	A1	19820309	CA 1979-325925	19790507
JP 54154760	A	19791206	JP 1979-56229	19790508
JP 62020982	В	19870511	1050 15006	10500500
GB 2022075	A	19791212	GB 1979-15906	19790508
GB 2022075	В	19820224	1050	10500500
ни 20568	A2	19810828	HU 1979-UE94	19790508
ни 178362	В	19820428		
SU 1093245	A3	19840515	SU 1979-2763201	19790508
SU 969701	A1	19821030	SU 1979-2847114	19791126
PRIORITY APPLN. INFO).:		GB 1978-18160	A 19780508
OFFIED (00HD0F (0)		N. 00 3600*	EP 1979-870012	A 19790502
OTHER SOURCE(S):	MARPA	AT 92:76284		

OTHER SOURCE(S):

MARPAT 92:76284

GΙ

$$R^{1}$$
 R^{2}
 $(CH_{2})_{m}$
 $NCH(COR)(CH_{2})_{n}OH$
 O
 I
 O
 I

The title compds. I [R = OH, (substituted) NH2; R1 and R2 = alkyl, aryl,AΒ haloaryl; m = 1-3, n = 0-2] were prepared for use as antiaggressive substances and for enhancement of memory (test data tabulated). Thus, 2-pyrrolidone reacted with NaH and 3-bromodihydro-2(3H)-furanone to give II, which reacted with NH3 in MeOH to give I (R = NH2, R1 = R2 = H, m = 1, n = 2).

ΙT 72762-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 72762-67-5 CA CN 1-Pyrrolidineacetamide, 4-(4-chlorophenyl)- α -(2-hydroxyethyl)-2-oxo-3-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L6 ANSWER 72 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 89:70801 CA
ORIGINAL REFERENCE NO.: 89:10819a,10822a

TITLE: Synthesis and properties of cyclic derivatives of succinic acid with anticonvulsant activity. Part 2

AUTHOR(S): Lange, J.; Rump, S.; Ilczuk, I.; Lapszewicz, J.;

Rabsztyn, T.; Walczyna, K.

CORPORATE SOURCE: Inst. Org. Chem. Technol., Warsaw Tech. Univ., Warsaw,

Pol.

SOURCE: Pharmazie (1977), 32(10), 579-81

CODEN: PHARAT; ISSN: 0031-7144

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 89:70801

GΙ

Ph O NNH2

AB Of 19 phenylsuccinimide derivs. synthesized, an N-amino derivative (I) showed an effective anticonvulsant effect against electroshock seizure in mice. The ED50s for anticonvulsant activities of 8 compds. are given. The other 11 compds. had no anticonvulsant activity at the administered dose level (1/4 LD50). The strongest anticonvulsant activities were exhibited by those compds. which had MeO- or -NH2 groups attached to the imide N. Synthesis scheme and acute toxicity data for the compds. are given.

IT 64505-33-5P RL: ADV (Adverse effect, including toxicity); SPN (Synthetic preparation);

10/585420

BIOL (Biological study); PREP (Preparation)

(preparation and anticonvulsant activity and toxicity of)

64505-33-5 CA RN

CN 1-Pyrrolidineacetic acid, 2,5-dioxo-3-phenyl-, ethyl ester (CA INDEX

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

ANSWER 73 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 87:168375 CA 87:26627a,26630a ORIGINAL REFERENCE NO.:

TITLE: Derivatives of dicarboxylic acids. XLIII.

Substituted succinimides containing glycine and

 $D-\alpha$ -alanylglycine

Mndzhoyan, O. L.; Avetisyan, S. A.; Azaryan, L. V. AUTHOR(S): CORPORATE SOURCE: Inst. Tonkoi Org. Khim. im. Mndzhoyana, Yerevan, USSR SOURCE:

Armyanskii Khimicheskii Zhurnal (1977), 30(6), 477-82

CODEN: AYKZAN; ISSN: 0515-9628

Journal DOCUMENT TYPE: LANGUAGE: Russian

GΙ

Succinic anhydrides I (R = H, NO2, Me2CHO) reacted with H-X-OEt (X = Gly, AB D-Ala-Gly) to give 4-RC6H4CH(CO2H)CH2CO-X-OEt and

4-RC6H4CH(CH2CO2H)CO-X-OEt, which were cyclized by Ac2O to II (R1 = CH2CO2Et, CHMeCONHCH2CO2Et).

64505-33-5P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 64505-33-5 CA

1-Pyrrolidineacetic acid, 2,5-dioxo-3-phenyl-, ethyl ester (CA INDEX CN NAME)

L6 ANSWER 74 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 87:39268 CA ORIGINAL REFERENCE NO.: 87:6187a,6190a

TITLE: Hydrazinocarboxamide derivatives

INVENTOR(S): Failli, Amedeo; Nelson, Verner R.; Immer, Hans U.;

Gotz, Manfred K.

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: U.S., 10 pp. Division of U.S. 3,888,840.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4000122	A	19761228	US 1975-565332	19750407
US 3888840	A	19750610	US 1973-330359	19730207
PRIORITY APPLN. INFO.:			US 1973-330359 A3	3 19730207
GI				

AB Hydrazinoalkanamides R1R2NNR3CR4R5CONHR6 (I; R1, R2 = alkyl; R1R2N = piperidino, morpholino; R3 = H, acyl, aroyl; R4 = alkyl, carboxyalkyl or esterified carboxyalkyl; R5 = H, alkyl, CR4R5 = cyclohexylidene; R6 = cyclohexyl, carboxyalkyl, carbamidoalkyl), useful as antibacterials, were prepared by reaction of hydrazones R1R2NN:CR4R5 with acids R3X (formic, benzoic, etc.) and isonitriles R6NC. Thus, a solution of Et levulinate dimethylhydrazone and cyclohexyl isonitrile in CH2Cl2 was treated with formic acid to give I (R1 = R2 = R5 = Me, R3 = HCO, R4 = CH2CH2CO2Et, R6 = cyclohexyl). I in which R4 and R6 = e.g., CH2CO2Et easily cyclized to succinimides II, also antibacterials.

IT 43041-49-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and bactericidal properties of)

RN 43041-49-2 CA

CN 1-Pyrrolidineacetic acid, 3-(1-formyl-2,2-dimethylhydrazinyl)-3-methyl-2,5-dioxo-4-phenyl-, ethyl ester (CA INDEX NAME)

L6 ANSWER 75 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 84:31498 CA
ORIGINAL REFERENCE NO.: 84:5161a,5164a

TITLE: Hydrazinocarboxamide derivatives

INVENTOR(S): Failli, Amedeo; Nelson, Verner R.; Immer, Hans U.;

Gotz, Manfred K.

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: U.S., 11 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 3888840	A	19750610	US 1973-330359	19730207	
US 4000122	A	19761228	US 1975-565332	19750407	
PRIORITY APPLN. INFO.:			US 1973-330359	A3 19730207	

GI For diagram(s), see printed CA Issue.

AB Condensation of Me2NN:CRR1 [R = Me, R1 = CH2CO2Et, CH2CH2CO2Et, CHPhCO2Et; R = H, R1 = Me2CH; RR1 = (CH2)5] with R2OH (R2 = HCO, Bz, 4-O2NC6H4CO, PhCH2O2C-Gly-Gly, Me3CO2C-Gly, Me3CO2C-Phe) and isonitriles CNR3 [R3 = cyclohexyl, MePh(MeO2C)C, EtO2CCH2, MeSCH2CH2(EtO2C)CH] gave the peptides Me2NNR2CRR1CONHR3 (I); cyclization of I (R1 = CH2CO2Et, CHPhCO2Et) gave the pyrrolidinediones II (R4 = H, Ph). The heterocyclic analogs III and IV (X = N, O) were prepared similarly. Thus, condensation of Me2NN:CHCHMe2, Me3CO2C-Gly-OH, and MeSCH2CH2(EtO2C)CHNC gave

N-[N-dimethylamino-N-tert-butoxycarbonylglycyl-DL-valyl]-DL-methionine Et ester, and condensation-cyclization of Me2NN:CMeCH2CO2Et, HOAc, and EtO2CCH2NC gave II (R = Me, R2 = Ac, R3 = CH2CO2Et, R4 = H). These compds. possessed antibacterial and trichomonacidal activity (no data).

IT 43041-49-2P

RN 43041-49-2 CA

CN 1-Pyrrolidineacetic acid, 3-(1-formyl-2,2-dimethylhydrazinyl)-3-methyl-2,5-dioxo-4-phenyl-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 76 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 83:170910 CA ORIGINAL REFERENCE NO.: 83:26751a,26754a

TITLE: High-speed photosensitive resin compositions

INVENTOR(S):
Ichimura, Kunihiro

PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KINI	D DATE	AP	PLICATION	NO.	DATE
	JP 5005010	7 A	1975	0506 JP	1973-9945	54	19730904
	JP 5101304	2 B	1976	0424			
]	PRIORITY APPLN.	INFO.:		JP	1973-9945	54 A	19730904
Ž	AB High-speed	photosensiti	ve resin	compns.,	which are	suitable fo	or use in

AB High-speed photosensitive resin compns., which are suitable for use in printing plates, are obtained by adding to a linear polymer containing the phenylmaleimido moiety ≥ 1 compound selected from 5-nitroacenaphthene, nitronaphthalene, dinitronaphthalene, trinitrofluorenone, anthraquinone, and β -methylanthraquinone as sensitizer. Thus, a 5% C1CH2CH2C1 solution of a copolymer of styrene and p-[(α -phenylmaleimido)acetoxy]styrene, obtained by treating a 1:1 copolymer of styrene and p-hydroxystyrene with α -phenylmaleimidoacetyl chloride, was mixed with 5-nitroacenaphthene (I) 10-15%. The resultant solution was coated on a roughened Al plate. The plate obtained showed a relative sensitivity 2.7 times that of the resin not containing I which already had a sensitivity comparable to a poly(vinyl cinnamate) resin sensitized with I.

IT 56959-06-9

RL: USES (Uses)

(photosensitive resin compns. containing, for photog. and printing plates)

RN 56959-06-9 CA

CN 1-Pyrrolidineacetic acid, 2,5-dioxo-3-phenyl-, 4-ethenylphenyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 56959-05-8 CMF C20 H17 N O4 CH=CH2

RL: SPN (Synthetic preparation); PREP (Preparation)

pyrazol-4-yl)-2,5-dioxo-3-phenyl- (CA INDEX NAME)

1-Pyrrolidineacetamide, N-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-

RN

54806-84-7P

54806-84-7 CA

(preparation of)

L6 ANSWER 78 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 79:115875 CA
ORIGINAL REFERENCE NO.: 79:18827a,18830a

TITLE: Model experiments directed towards the synthesis of

N-aminopeptides

AUTHOR(S): Failli, Amadeo; Nelson, Vern; Immer, Hans; Goetz,

Manfred

CORPORATE SOURCE: Dep. Chem., Ayerst Res. Lab., Montreal, QC, Can.

SOURCE: Canadian Journal of Chemistry (1973), 51(16), 2769-75

CODEN: CJCHAG; ISSN: 0008-4042

DOCUMENT TYPE: Journal LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Modified peptides containing a 1,1-disubstituted hydrazide [I: R = H, Ph, p-(NO2)Ph, PhCH2O2CNHCH2CONHCH2; R1 = CH2CO2Et, CH(CO2Me)CH2Ph], not previously described, were prepared by the Ugi reaction. Use of

 $\verb|CH3C(CH2CO2Et): NNMe2| in the reaction gave products which underwent ring| \\$

closure to give 2,5-dioxopyrrolidines (II).

IT 43041-49-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 43041-49-2 CA

CN 1-Pyrrolidineacetic acid, 3-(1-formyl-2,2-dimethylhydrazinyl)-3-methyl-2,5-dioxo-4-phenyl-, ethyl ester (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L6 ANSWER 79 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 78:117602 CA
ORIGINAL REFERENCE NO.: 78:18847a,18850a

TITLE: (Diacylamino) acetanilides as yellow photographic color

formers

INVENTOR(S): Arai, Atsuaki; Oishi, Yasushi; Okumura, Akio; Nakazyo,

Kivoshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd.

SOURCE: Ger. Offen., 122 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
DE 2213461	A	19721130	DE 1972-2213461		19720320
DE 2213461	C2	19870702			
AU 7240178	A	19730927	AU 1972-40178		19720320
GB 1386151	A	19750305	GB 1972-13030		19720320
CA 1041345	A1	19781031	CA 1972-137466		19720320
US 4404274	A	19830913	US 1981-251561		19810406
PRIORITY APPLN. INFO.:			JP 1971-15997	Α	19710320
			US 1972-235937	Α1	19720320

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 78:117602

GI For diagram(s), see printed CA Issue.

AB Group reduces the coupling requirement from 4 moles Ag halide to 2 moles. The color formers have the advantages of high coupling activity, bleachability in Fe-EDTA baths without strong oxidant, and of dye images with high fastness to light and humidity. Thus, by refluxing $\alpha\text{-pivalyl-}\alpha\text{-chloro-}5\text{-}[\alpha\text{-}(2,4\text{-di-tert-amylphenoxy})$ butyramido]-2-chloroacetanilide with phthalimide in MeCN in the presence of Et3N a Cl was replaced to form I. The coupler was dissolved at 70° in a mixture of di-Bu phthalate and cyclohexanone, dispersed in aqueous gelatin, coated as 7 μ Ag halide emulsion layer, imagewise exposed, and processed. The characteristics of the resulting image (absorption maximum 449 nm) were (vs. those obtained using the coupler without phthalimide substitution): relative speed 100 (95), Dmax. 3.06 (1.87), γ 2.23 (0.65), and fog 0.20 (0.11).

IT 41435-03-4

RL: USES (Uses)

(photographic yellow couplers)

RN 41435-03-4 CA

CN 1-Pyrrolidineacetamide, N-[5-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]acetyl]amino]-2-chlorophenyl]- α -(cyclohexylcarbonyl)-2,5-dioxo-3-phenyl- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L6 ANSWER 80 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 64:103832 CA

ORIGINAL REFERENCE NO.: 64:19480g-h,19481a-e

TITLE: Compounds structurally related to

 α -phthalimidoglutarimide (thalidomide). II. Synthesis and pharmacological properties of

a-acylimidobutyramides

AUTHOR(S): Bianchi, M.; Barzaghi, F.

CORPORATE SOURCE: Lab. Ric. "Vister," Casatenovo Brianza, Italy

SOURCE: Farmaco, Edizione Scientifica (1965), 20(11), 764-80

CODEN: FRPSAX; ISSN: 0430-0920

DOCUMENT TYPE: Journal LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AΒ cf. CA 64, 125943. The depressant action on the central nervous system displayed by α phthalimidobutyramide (I) (ibid. (9), 611-28) structurally related to thalidomide, prompted the synthesis of the title compds. An equimol. mixture of EtCH(NH2)CO2H (II) and a substituted phthalic anhydride, melted 20 min. at 160°, gave the following III (R2 = OH) (IV) (R, R1, m.p. purified compds., and % yield given): H, PhCH2O, 155-6°, 88; NO2, H, 154-5°, 90; H, NO2, 163-4°, 92 (IVa); Cl, H, --, --; H, Cl, --, --; MeO, H, --, --; H, MeO, --, --. By a similar procedure, II and an appropriate anhydride gave the following RCHEtCOR1 (V) (R1 = OH) (VI) (R, m.p., and % yield given): tetrahydrophthalimido, 127-8°, 76 (VIa); hexahydrophthalimido, b0·1 168-70°, -- (VIb); 1,8-naphthalimido, 220-2°, 20 (the reaction was carried out in refluxing tetralin) (VIc); homophthalimido, 163-5°, 40 (VId). 4-Benzoyl phthalic anhydride was prepared as follows. To 1.56 g. Na in 380 ml. anhydrous EtOH, 14.5 g. di-Me 4-hydroxyphthalate, then 8.7 g. PhCH2Cl added and the mixture refluxed 7 hrs. gave 16 g. crude di-Me 4-benzyloxyphthalate, b0 \cdot 2 155-60° which refluxed in alc. KOH 1.5 hrs. yielded 12.8 g.

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4-benzyloxyphthalic acid, m. 196-7°, eventually melted 10 min. at
195° to give 81.5% of the desired anhydride, m. 131-2°. A
mixture of 10 g. IV and 30 ml. SOC12, heated at 60-5^{\circ} until solution,
the excess of SOC12 distilled, the residue dissolved in Et20, and dry NH3
bubbled into the resulting solution gave the following III (R2 = NH2) (VII)
(R, R1, m.p. and % yield given): H, PhCH2O, 148-50°, 80 (VIIa);
NO2, H, 165-6°, 69 (VIIb); H, NO2, 157-9°, 68 (VIIc); Cl, H,
157-9^{\circ}, 69 (VIId); H, Cl, 176-8^{\circ}, 54 (VIIe); MeO, H,
160-2°, 68; H, MeO, 171-2°, 62; H, OH, 205-6°, 74.5
(from VIIa) (VIIf); NH2, H, 170-1°, 43 (from VIIb) (VIIg); H, NHAc,
194-5°, 53.5 (from VIIc) (VIIh). VIIf, VIIg were obtained by
hydrogenation with 10% Pd-C in MeOH of VIIa or VIIb, resp. By the same
procedure VIIc was reduced to the corresponding amino derivative which treated
with Ac20 at 40-5° gave VIIh. VIIh was also prepared by reducing
catalytically IVa to 92% IV (R = H, R1 = NH2), m. 182-4^{\circ}; its
N-acetyl derivative, m. 227°, treated with SOC12 then with dry NH3 gave
28.5% VIIh. By the method employed for VII the following V (R1 = NH2)
(VIII) were prepared (starting VI, m.p., and % yield given): VIa,
154-5°, 54; VIb, 160-1°, 46; VIc, 248-50°, 62; VId,
194-6°, 27. Similarly, \alpha-homophthalimidopropionamide, m.
237-40°, was obtained from the corresponding acid, m.
188-90°, which was prepared by melting an equimol. mixture of
homophthalic anhydride and dl-alanine (IX). IX (2.67 g.), 5.28 g.
phenylsuccinic anhydride (X), and 25 ml. C5H5N refluxed 2.5 hrs., the
residue treated with dilute NaHCO3, extracted with Et2O and the sq. layer
acidified, gave an oil, b0 \cdot 1 \ 180-4^{\circ}, which treated with
SOC12 then with dry NH3 in C6H6 yielded 19%
\alpha-phenylsuccinimidopropionamide, m. 208-10°. By the same
procedure, II and X gave an oil, b0.2\ 180-90^{\circ}, which treated
with SOC12, then with dry NH3 yielded 36% VIII (R =
\alpha-phenylsuccinimido), m. 156-8°. The Et ester of II as HCl
salt treated in C5H5N with 30% excess RCOCl and the mixture allowed to stand
overnight, gave the following RCONHCHEtCOR1 (XI) (R1 = OEt) (XII) (R,
m.p., and % yield given): 4-ClC6H4, 79-81°, 71 (XIIa); 4-MeOC6H4,
84-5^{\circ}, 82 (XIIb); 3,4,5-(MeO)3-C6H2, 105-6^{\circ}, 67 (XIIc). A
solution of 15 q. XII in 120 ml. EtOH saturated at 0° with dry NH3 and
heated 85 hrs. at 60° in a sealed tube, yielded the following XI
(R1 = NH2) (starting XII, m.p. and % yield given): XIIa, 210-12^{\circ},
54.5; XIIb, 209-10°, 56; XIIc, 240-1°, 99. The pharmacol.
results indicated that the glutarimidic group is less important than the
phthalic group for the depressant action on the central nervous system.
Among the products synthesized, VIId and VIIe exhibited an activity
comparable to that of I.
3830-15-7P, 1-Pyrrolidineacetamide,
\alpha-ethyl-2,5-dioxo-3-phenyl-
RL: PREP (Preparation)
   (preparation of)
3830-15-7 CA
1-Pyrrolidineacetamide, \alpha-ethyl-2,5-dioxo-3-phenyl- (CA INDEX NAME)
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ΙT

RN CN

L6 ANSWER 81 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 52:11119 CA

ORIGINAL REFERENCE NO.: 52:2007i,2008a-i,2009a-b

TITLE: Synthesis of methyl 6-phenyl-3-methyl-3-azapimelate

AUTHOR(S): Koelsch, C. F.; Robinson, Franklin M.

CORPORATE SOURCE: Univ. of Minnesota, Minneapolis

SOURCE: Journal of Organic Chemistry (1956), 21, 1211-13

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal Unavailable OTHER SOURCE(S): CASREACT 52:11119

Methyleneaminoacetonitrile (245 g.) and 0.9 ml. concentrated HCl was added to 103 g. HCN which had been frozen in a 2-1. flask, the flask closed tightly and kept at room temperature 6 days, excess HCN removed in vacuo, and the brown residue dissolved in 500 ml. hot EtOAc and boiled 2 min. with Norit. On addition of 200 ml. C6H6, a small amount of tar precipitated and cooling to 0° gave 229 g. slightly brown HN(CH2CN)2 (I), m. 75-8°. An addnl. 31 g. I was obtained by concentration of the mother liquor, m. 77-9° (H2O or EtOAc-C6H6). To 430 g. HCl in 2 l. MeOH was added 272 g. I (uncrystd.) in small portions while the mixture was stirred and cooled over 45 min., 105 ml. H2O added, the mixture boiled 2 hrs., treated with an addnl. 200 ml. 27% HCl-MeOH and boiled 1.5 hrs. longer, NH4Cl removed by filtration of the hot mixture and washed with 400 ml. hot MeOH, and the solution cooled to -15° overnight to give 87% (MeO2CCH2)2NH.HCl (II), m. 166-70°. The product contained some NH4Cl, but was pure enough for acylation. Crystallization from MeOH gave pure II, m. 177-8° (decomposition). II (39.6 g.) in 100 ml. H2O was added to a cold stirred mixture of 120 ml. H2O and 37 g. NaHCO3, 34 g. PhCH2COCl added at -5 to 0° during 20 min., stirring continued an hr., the product washed with H2O, and recrystd. from MeOH-H2O gave 84-91% Me N-phenylacetyliminodiacetate (III), m. $82-2.5^{\circ}$. NaOMe was prepared from 4.1 g. powdered Na and 15 ml. MeOH in 120 ml. PhMe. To this was added 46 g. III and the mixture distilled slowly until no more MeOH was obtained. The solid washed with Et20, stirred into 20 ml. HCl in 200 ml. H2O, and the crude product crystallized from 1:2 MeOH-H2O afforded 81% Me $_2$, $_4$ -dioxo-3-phenylpyrrolidylacetate (IV), m. 157-8°; phenylhydrazone, m. 183-4° (decomposition). With alc. FeCl3, IV gave a dark green color that became violet when H2O was added. When cyclization of III was carried out using NaOEt in PhMe, ester interchange occurred and IV Et ester formed, m. $149-50^{\circ}$ (EtOAc). When the Na salt obtained by cyclization of III was allowed to stand in H2O, ester hydrolysis occurred giving 2,4-dioxo-3-phenylpyrrolidylacetic acid (V), m. $238-9^{\circ}$ (dilute AcOH). V was better obtained by boiling

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3 g. IV in 20 ml. 10% NaOH and acidifying with HCl. V was reconverted to
     III in 20% yield by boiling with 10% methanolic HCl. IV (37 g.) in 200
     ml. MeOH containing 4 g. Raney Ni was shaken under 30-40 lb. H at 50^{\circ}.
     After 22 hrs. fresh catalyst was added and hydrogenation continued an
     addnl. 18 hrs. Distillation gave 29 g. Me 3-phenyl-2-pyrrolidone-N-acetate
     (VI), b5 186-7°, n26D 1.5378. Saponification of VI gave
     3-phenyl-2-pyrrolidone-N-acetic acid (VIa) hydrate, m. 62-4° (50%
     AcOH), anhydrous VIa, m. 108-9^{\circ} (C6H6). When hydrogenation of 13
     q. IV was stopped after one equivalent H had been taken up and MeOH removed in
     vacuo, an oil containing some alkali-insol. solid was obtained. Treatment
     with cold Et20 left 2.8 g. crude product, recrystd. from dilute MeOH, giving
     Me 4-hydroxy-3-phenyl-2-pyrrolidone-N-acetate (VII), m. 145-6°.
     Dehydration of 2.4 g. VII by boiling with 20 ml. Ac20 and 1 g. KOAc 25
     hrs. gave 0.5 g. Me 3-phenyl-\Delta3-2-pyrrolone-N-acetate (VIII), yellow
     crystals, m. 80-1^{\circ} (C6H6). VIII (0.9 g.) in MeOH was shaken with
     C, then Raney Ni and finally reduced in the presence of colloidal Pd
     giving 4 fractions, the 3rd fraction being identical with VI. VI (18.2
     g.) in 65 ml. 42% HBr was boiled 7 hrs., distilled until the solution b.
     122°, boiled 1 hr. more, evaporated in vacuo, the residue dissolved in
     35 ml. H2O, adjusted to pH 6 with 10% NaOH, and kept at 0° several
     hrs. gave 10.1 g. 6-phenyl-3-azapimelic acid (IX), m. 164-5^{\circ}
     (decomposition) (H2O). Acidification of the mother liquors gave 4.8 g. VIa
     hydrate, m. 60-4^{\circ}. IX and PhSO2Cl formed
     3-benzenesulfonyl-6-phenyl-3-azapimelic acid, m. 148-50°
     (C6H6-EtOAc). IX (10.1 g.), 20 g. formalin, and 50 g. 90% HCO2H boiled 11
     hrs., distilled to dryness in vacuo, the residue dissolved in 50 ml. MeOH
     saturated with HCl, boiled 1 hr., the MeOH removed in vacuo, and 20 ml. ice
     H2O added followed by cold NaOH solution and Et2O gave 5 g. Me
     3-methyl-6-phenyl-3-azapimelate (X), b10 180-5°, n26D 1.4981;
     picrolonate, yellow, m. 158-9^{\circ} (decomposition). Treatment of 47.5 g. I
     in 250 ml. cold H2O with 46 g. NaHCO3 and 80 g. PhCH2COC1 afforded 61\%
     N-phenylacetimidodiacetonitrile (XI), m. 128-9° (alc. or EtOAc).
     Attempts to hydrolyze or alcoholize the CN groups always led to removal of
     the PhCH2CO group. XI (5 g.) in 25 ml. MeOH was treated with 0.5 ml. 23%
     NaOMe in MeOH, the mixture warmed until solution occurred, boiled 1 min.,
     cooled rapidly, distilled to dryness in vacuo at 15°, and the dark
     product crystallized 5 times from dilute EtOH giving 0.5 g.
     3-phenyl-4-imino-2-pyrrolidone-N-acetonitrile (XII), m. 2356°
     (decomposition). A similar experiment in which the basic catalyst was
neutralized
     with HCl before removal of solvent gave no iminonitrile but only a small
     amount of 2,4-dioxo-3-phenylpyrrolidylacetamide, (XIII), m. 179-80°
     (alc.). This amide was not obtained when 5 g. IV was kept 2 days at room
     temperature in 30 ml. concentrated NH4OH. Instead, 3 g.
     4-imino-3-phenyl-2-pyrrolidone-N-acetic acid (XIV), plates, m.
     239-41° (EtOH), was isolated. XII, XIII, and XIV were all
     converted into IV on treatment with methanolic HCl and into V with aqueous
     HCl. X was prepared for possible conversion into piperidones useful in a
     projected morphine synthesis.
     101891-18-3
     RL: PREP (Preparation)
        (Derived from data in the 6th Collective Formula Index (1957-1961))
     101891-18-3 CA
     1-Pyrrolidineacetic acid, 2-oxo-3-phenyl-4-(2-phenylhydrazinylidene)-,
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methyl ester (CA INDEX NAME)

ΙT

RN

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L6 ANSWER 82 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 52:11118 CA ORIGINAL REFERENCE NO.: 52:2007c-i

TITLE: Substituted 1,10-phenanthrolines. X. Ethyl derivatives AUTHOR(S): Case, F. H.; Jacobs, Z. B.; Cook, R. S.; Dickstein, J.

CORPORATE SOURCE: Temple Univ., Philadelphia, PA

SOURCE: Journal of Organic Chemistry (1957), 22, 390-3

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: Unavailable OTHER SOURCE(S): CASREACT 52:11118

cf. preceding abstract p-EtC6H4NHAc (33.7 g.) added in 1- to 2-g. portions to 122 g. HNO3, the material cooled when the temperature rose to 40° , the addition continued so that the temperature was maintained at $35-40^{\circ}$, the mixture left 15 min., poured on ice, extracted with 100 ml. C6H6, and the exts. dried gave 32.3 g. 4,2-Et(O2N)C6H3NHAc, m. 45-7° (ligroine). o-EtC6H4NH2 (153 g.) added during 1 hr. at 20-30° to 1215 g. 40% HBr, the slurry cooled to 5°, 121 g. NaNO2 added during 1 hr. at 5-10°, the mixture heated to 30° with 5 g. Cu powder, the temperature kept 1 hr. at 15° after decomposition started, then raised 0.5 hr. to $90-5^{\circ}$, H2O added, the mixture steam-distilled, and the distillate made alkaline and extracted with C6H6 gave 111 g. o-EtC6H4Br, b8 64°, n20D 1.5487; acidification of the alkaline washings yielded 29 g. o-EtC6H4OH, b13 88-90°, 77.8 g. of which in 200 ml. Et20 added slowly to 12.4 g. Mg, the mixture refluxed 2 hrs., 126 g. Et2SO4 in Et20 added to maintain mild reflux, the mixture refluxed a further 2 hrs., poured into ice-cold 10% H2SO4, and the washed (H2SO4, H2O) and dried (Na2SO4) Et20 layer fractionally distilled gave 32.5 g. o-C6H4Et2, b17 70-3°, n20D 1.5033. A number of substituted 8-nitroquinolines (I) and substituted 1,10-phenanthrolines (II) and intermediates were prepared by the following general procedures. (A) The appropriate aromatic amine (1 mole), 1 mole H3AsO4.0.5H2O (III), 4 moles 96.8% H2SO4, and a volume of H2O equal to 1/3 the volume of H2O was treated at 100° with 3.5 moles glycerol (IV) or 2 moles C1CH2CH2Ac (V) at such a rate that the temperature remained below 140°, heated 2 hrs. longer, poured into water, made alkaline, both the filtrate and the precipitate extracted with hot C6H6, the C6H6

removed, and the II recrystd. from C6H6-petr. ether, except the 5,6-di-Et compound, for which petr. ether alone was used. (B) The aromatic amine (1 mole), 2 moles III, and 85% H3PO4 (100 ml./l. amine) at 100° was treated with 1.3 moles V or 2 moles CH2:CEtCHO (VI) so that the temperature did not exceed 105° , kept at this temperature 0.5 hr. longer, poured on ice,

neutralized with concentrated NH4OH, the precipitate and filtrate extracted with hot C6H6, and the exts. evaporated to dryness; the I were crystallized from the solvents indicated, the 3,8-diethylphenanthroline from C6H6-petr. ether. The results are shown below. I (substituent in I, method, substituent in 1st component (aniline), 2nd component, m.p., % yield of I, and crystallization solvent given): 3-Et, B, 2-O2N, VI, 89-90, 23, MeOH; 4-Et, B, 2-O2N, V, 96-7°, 55, C6H6-petr. ether; 6-Et, A, 4,2-Et(O2N), IV, $82-3^{\circ}$, 55, EtOH-H2O; 4,6-Et2, B, 4,2-Et(O2N) (Ac derivative), V, 84.5°, 46, C6H6-petr. ether; 5,6-Et2, A, 4,5,2-Et2(O2N), IV, 95-6°, 63, petr. ether. II (substituents in II, method, substituents in 1st component (8-aminoquinoline), 2nd component, and m.p. and % yield of II given): 3-Et, A, 3-Et, IV, 144-5°, 47; 4-Et, A, 4-Et, IV, 108-9°, 18; 5-Et, A, 6-Et, IV, 80-1°, 14; 3,8-Et2, B, 3-Et, VI, 112-13°, 16; 4,6-Et2, A, 4,6-Et2, IV, 130-1°, 19; 4,7-Et2, A, 4-Et, V, 116-17°, 27; 5,6-Et2, A, 5,6-Et2, IV, 161-2°, 44. Catalytic reduction of the II (except the 4,6-Et2 derivative for which SnCl2 in alc. was used as the reducing agent) with PtO2 gave the corresponding the 8-aminoquinolines; the 3-Et, b2 151-4°, 4-Et, m. $60-1^{\circ}$, and 6-Et derivative, b6 $161-2^{\circ}$, were prepared ΙT 101891-18-3 (Derived from data in the 6th Collective Formula Index (1957-1961)) 101891-18-3 CA RN 1-Pyrrolidineacetic acid, 2-oxo-3-phenyl-4-(2-phenylhydrazinylidene)-, CN

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L6 ANSWER 83 OF 83 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 47:51524 CA

methyl ester (CA INDEX NAME)

ORIGINAL REFERENCE NO.: 47:8733f-i,8734a-e

TITLE: The condensation products of oxalyl chloride with monosubstituted amides: structure and reactions

AUTHOR(S): Sheehan, John C.; Corey, Elias J.

CORPORATE SOURCE: Massachusetts Inst. of Technol., Cambridge

SOURCE: Journal of the American Chemical Society (1952), 74,

360-5

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal LANGUAGE: Unavailable GI For diagram(s), see printed CA Issue.

AB cf. C.A. 45, 1115d. A study was made of the reaction products of (COCl)2 with phenylacetamides and the methods by which the resulting heterocyclic system can be degraded to the original monosubstituted amides. The correctness of the 2-benzylideneoxazolidine-4,5-dione (I) structures

assigned to the condensation products was established by the preparation of the isomeric pyrrolidine-2,3,5-triones, which represent the alternative formulation. The triones are formed readily only by base-catalyzed cyclization. Aminolysis represents the most practical procedure for obtaining phenylacetamides from I. The possible application of 2-benzylidene-4,5-dioxo-3-oxazolidineacetyl chloride (II) in the indirect synthesis of benzylpenicillin and its analogs is discussed. II (1.50 q.) in 10 cc. each dioxane and C6H6 at 5° treated dropwise with 1.05 q. PhNH2 in 5 cc. C6H6 and the mixture let stand 20 min. yielded 1.55 g. 2-benzylidene-4,5-dioxo-3-oxazolidineacetanilide (III), fine yellow needles, m. 260-2° (in bath at 250°). Benzyl phenaceturate (IIIA) (8.49 g.) in 30 cc. dioxane containing 6.0 cc. (COC1)2 let stand 2 hrs. yielded 8.30 g. benzyl 2-benzylidene-4,5-dioxo-3-oxazolideneacetate (IV), fine yellow needles, m. $178-9^{\circ}$ (all m.ps. corrected). II (0.100 g.), 0.0406 g. PhCH2OH, and 0.0298 g. pyridine let react 15 min. in 20 cc. C6H6, the mixture filtered, and the filtrate diluted with 40 cc. petr. ether yielded 0.070 g. IV, m. 177.5-80°. III (0.200 g.) in 10 cc. Me2CO treated with 17.34 cc. 0.1074N NaOH, the solution warmed on the steam bath, cooled, extracted with CHCl3, and the CHCl3 evaporated yielded 0.065 g. PhCH2CONHCH2CONHPh, m. 154-6°. The aqueous solution upon acidification and extraction with CH2Cl2 yielded a yellow oil. III (0.400 g.) in 35 cc. dioxane treated during 45 min. with 12.0 cc. 0.1074N NaOH, and the solution concentrated to 5 cc., dissolved in 15 cc. water, and extracted with Et20 vielded

0.118 g. CO.CO.CHPh.CO.NR(V)(R = CH2CONHPh), yellow needles, m. 236.5-7.5° (in bath at 230°), IV (0.500 g.) in 40 cc. Me2CO treated with 28 cc. 0.1074N NaOH at 0°, the solution let stand 30 min. at room temperature, concentrated in vacuo, extracted with CHCl3, the aqueous solution acidified,

extracted with CHCl3, and the CHCl3 evaporated yielded 0.012 g. V, R = CH2CO2CH2Ph) (VI), m. $134-6^{\circ}$. IV (1.00 g.), 25 cc. absolute EtOH, and 1 drop of pyridine heated 13 min. on the steam bath, titrated during 8 min. with 26 cc. 0.1074N NaOH, the solution extracted with CHCl3, and the CHCl3 evaporated yielded 0.125 g. IIIA, m. $90-3.2^{\circ}$; acidification of the aqueous solution from the extraction yielded 0.470 g. VI m. 137.8-8.4°; 2,4-dinitrophenylhydrazone, m. 243.2-4.3°. VI (0.050 g.) in 3 cc. Et20 with 0.030 g. Ph2CN2 yielded 0.040 g. benzhydryl enol ether of VI, m. $128.5-9.5^{\circ}$. VI (1.25 g.) in 10 cc. absolute EtOH containing a trace of pyridine heated 13 min. on the steam bath and the solution let stand 1 hr. at 5° yielded 1.05 q. PhCH2CON(OCCO2Et)CH2CO2CH2Ph (VII), m. 100-100.7°; the filtrate yielded 0.160 g. VI, m. 137-7.8°. The tert-Bu ester from IV m. 126.3-7.5°. Ethanolysis of Me 2-benzylidene-4,5-dioxo-3-oxazolideneacetate, m. 188.5-9°, (15 min.) yielded Me β -ethoxalylphenaceturate, m. 97.3-8.5°, and Me 3-phenyl-2,4,5-trioxopyrrolidineacetate, m. 134.2-5.3°. VII (0.630 g.) in 20 cc. dioxane treated with 0.045 powdered NaH, the mixture refluxed 40 min. under N, and the solution concentrated to an oil yielded 0.380 q.

VI, m. $137.4-8.4^{\circ}$. IV after the same treatment was recovered unchanged. VII (0.100 g.) in 5 cc. EtOH and 1.5 cc. dioxane at 0° treated 5 min. with 0.261 cc. N NaOH, and the solution diluted with water and extracted with CHCl3 yielded 0.020 g. IIIA, m. $94-5^{\circ}$. IV (0.350 g.) in 10 cc. C6H6 with 0.242 g. PhCH2NH2 yielded 0.275 g. N,N'-dibenzyloxamide (VIII) m. $220.5-2^{\circ}$; the filtrate on concentration gave 0.200 g. IIIA. IV with PhNHNH2 yielded 69% IIIA. IV with MeNH2 after 12 days yielded 53% IIIA and 71.5% (CONHMe)2. III (0.300 g.) in 10 cc. dioxane and 15 cc. C6H6 treated 12 hrs. with PhCH2NH2 yielded 96% VIII, m. $220-2^{\circ}$, and

10/585420

61% PhCH2CONHCH2CONHPh, m. 158-62°. 1081533-97-2P ΙT RL: SPN (Synthetic preparation); PRP (Properties); PREP (Preparation) (The condensation products of oxalyl chloride with monosubstituted amides: structure and reactions) 1081533-97-2 CA RN 1-Pyrrolidineacetic acid, 2,3,5-trioxo-4-phenyl-, phenylmethyl ester (CA CN INDEX NAME) CH2-C-O-CH2-Ph OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) => d his (FILE 'HOME' ENTERED AT 09:47:47 ON 30 DEC 2009) FILE 'REGISTRY' ENTERED AT 09:48:44 ON 30 DEC 2009 STRUCTURE UPLOADED L150 S L1 SAM L2 STRUCTURE UPLOADED L3 L450 S L3 SAM 11832 S L3 FULL L5 FILE 'CA' ENTERED AT 09:51:00 ON 30 DEC 2009 L6 83 S L5 => ---Logging off of STN---=> Executing the logoff script... => LOG Y

STN INTERNATIONAL LOGOFF AT 09:53:11 ON 30 DEC 2009